

**CASE**

**NUMBER:**

99 - 434

Filed 12-17-99



COMMONWEALTH OF KENTUCKY  
**PUBLIC SERVICE COMMISSION**  
211 SOWER BOULEVARD  
POST OFFICE BOX 615  
FRANKFORT, KY. 40602  
(502) 564-3940

March 10, 2000

To: All parties of record

RE: Case No. 1999-434

We enclose one attested copy of the Commission's Order in  
the above case.

Sincerely,

A handwritten signature in cursive script that reads "Stephanie Bell".

Stephanie Bell  
Secretary of the Commission

SB/hv  
Enclosure

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COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

REVIEW OF BELLSOUTH )  
TELECOMMUNICATIONS, INC.'S ) CASE NO. 99-434  
PRICE REGULATION PLAN )

O R D E R

The Commission established this proceeding to review the terms of the price regulation plan of BellSouth Telecommunications, Inc. ("BellSouth") and examine options for modifications to the plan. BellSouth has filed its response to the audit report conducted by Vantage Consulting, Inc. and has filed its productivity analysis and proposed changes to the price regulation plan.

BellSouth should respond to the following requests for information:

1. BellSouth's equity returns have been high over the past few years. The Audit Report discusses the total factor productivity ("TFP") index as being "backward-looking" and states that BellSouth achieved its productivity gains in part by decreasing its workforce.
  - a. Explain why productivity gains are going to diminish over the next two years.
  - b. If BellSouth's earnings remain high, is this a sign that BellSouth is continuing to experience productivity gains in excess of the inflation rate?

c. BellSouth is currently restructuring its labor force in certain categories. Does this counteract some of the productivity losses sustained from hiring additional labor in other categories? Explain.

d. Provide BellSouth's projections for the next 2 calendar years for intrastate regulated revenues, regulated expenses, and taxes by major Part 32 accounts.

e. Explain the current status of the Federal Communication Commission's ("FCC") deliberations regarding the productivity factor applicable to price cap companies.

2. Provide a complete price out of the services currently in each market basket.

3. Provide a complete price out of the services as proposed in each renamed and restructured market basket.

4. Would BellSouth advocate that all incumbent local exchange carriers ("ILECs") in Kentucky eliminate their respective non-traffic sensitive revenue requirement ("NTSRR") in the same manner as it is advocating for itself? Explain.

5. If the Commission eliminates NTSRR, how will the coming changes in the structure of access charges at the federal level be handled in Kentucky? Explain in detail.

6. Provide the cost studies supporting proposed UNE non-recurring charges, as well as all workpapers and explanations.

7. a. Provide the UNE price lists by state for all UNEs, including non-recurring charges, resulting from arbitration proceedings in any BellSouth state.

b. Regarding these other state arbitration proceedings, are there any UNE rates for which a BellSouth cost model was not used? If so, which UNE rates and what cost model were used?

8. Is BellSouth aware of any price cap plan containing market baskets structured similarly to those in its proposal? Explain.

9. Regarding Service Quality Measures, is BellSouth aware of any measures being contemplated at the FCC which would impact those "services" in the proposed "industrial" or "retail" market baskets? If so, list the items and explain.

10. Regarding Service Quality Measures, are there any arbitration proceeding decisions or any ongoing arbitration proceedings in any BellSouth state, containing Service Quality Measurements that would impact any of the proposed market baskets? If so, list by state and explain.

11. For those services in the proposed "industrial" market basket, what competitive pressures will discipline BellSouth to maintain high levels of service quality, especially after it enters the interLATA markets?

12. What does BellSouth see as alternatives if the Commission decides not to raise local rates, as proposed in its filing?

13. If NTSRR is eliminated by rolling it into local rates, then how should further access charge reform at the federal level be treated in Kentucky?

14. a. How does the Coalition for Affordable Local and Long Distance Services ("CALLS") proposal affect BellSouth's filing? Explain.

b. Since the CALLS proposal agrees to continue with a 6.5 percent productivity factor, does BellSouth see any conflict with the auditor's reports, which recommends discontinuation of the productivity factor? Explain.

IT IS HEREBY ORDERED that BellSouth and other parties shall comply with the procedure set forth herein.

1. By March 24, 2000, BellSouth shall respond to the items requested herein.
2. By April 7, 2000, parties may submit additional requests to BellSouth.
3. By April 24, 2000, BellSouth shall respond to the additional requested items.
4. By May 8, 2000, direct prefiled testimony of all witnesses shall be submitted.
5. Any party filing testimony shall file an original and 12 copies. The original and at least 3 copies of the testimony shall be filed as follows:
  - a. Together with cover letter listing each person presenting testimony.
  - b. Bound in 3-ring binders or with any other fastener which readily opens and closes to facilitate easy copying.
  - c. Each witness's testimony should be tabbed.
  - d. Every exhibit to each witness's testimony should be appropriately marked.
6. There shall be a public hearing in Hearing Room 1 of the Commission's offices at 211 Sower Boulevard, Frankfort, Kentucky beginning at 9:00 a.m., Eastern Daylight Time, on June 6, 2000. Opening statements, closing statements and direct testimony shall be permitted only upon special leave.

Done at Frankfort, Kentucky, this 10th day of March, 2000.

By the Commission

ATTEST:

A handwritten signature in cursive script, appearing to read "Matt Hudson", written over a horizontal line.

Executive Director



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**Public Protection and**  
**Regulation Cabinet**

**Helen Helton**  
**Executive Director**  
**Public Service Commission**

**Paul E. Patton**  
**Governor**

January 10, 2000

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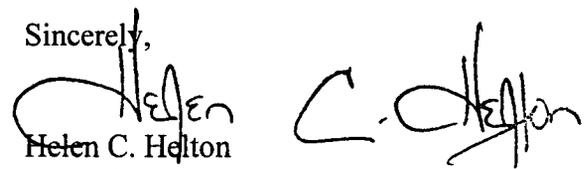
RE: Letter for Confidential Protection  
Case No.: 99-434

Dear Mr. Mershon:

The Commission has received your letter filed December 17, 1999, to protect as confidential Attachment 4 to Bell South's Transition Regulation Plan, all part of Bell South's response to PSC order dated 10/25/99 regarding Management Audit. A review of the information has determined that it is entitled to the protection requested on the grounds relied upon in the letter, and it shall be withheld from public inspection.

If the information becomes publicly available or no longer warrants confidential treatment, you are required by 807 KAR 5:001, Section 7(9)(a) to inform the Commission so that the information may be placed in the public record.

Sincerely,

  
Helen C. Helton  
Executive Director



AN EQUAL OPPORTUNITY EMPLOYER M/F/D



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December 21, 1999

Helen C. Helton  
Executive Director  
Public Service Commission  
730 Schenkel Lane  
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RECEIVED  
DEC 21 1999  
PUBLIC SERVICE  
COMMISSION  
RECEIVED  
DEC 22 1999  
PUBLIC SERVICE  
COMMISSION

Re: Review of BellSouth Telecommunications, Inc.'s Price  
Regulation Plan  
PSC 99-434

Dear Helen:

In connection with BellSouth's filing in the above-captioned case on December 17, 1999, reference is made to footnote 8 on page 5 of the Response of BellSouth Telecommunications. The footnote indicates the "USTA Ex Parte, September 10, 1999, filing in Docket No. 94-1 by Linda Kent" is attached to the pleading itself. Actually, the USTA Ex Parte TFP Study Update is included in BellSouth's filing as Attachment 6 to the BellSouth Transition Regulation Plan.

Sincerely,

Creighton E. Mershon, Sr.

cc: Parties of Record

190520



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December 17, 1999

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RECEIVED  
DEC 17 1999  
PUBLIC SERVICE  
COMMISSION

Re: Review of BellSouth Telecommunications, Inc.'s Price  
Regulation Plan  
PSC 99-434

Dear Helen:

Enclosed for filing in the above-captioned case are the original and ten (10) copies of BellSouth's response to the Commission's October 25, 1999, Order in this case.

A portion of the filing (Attachment 4 to BellSouth's Transition Regulation Plan) contains confidential, commercial, or proprietary information. Similar information was granted confidentiality by the Commission in Administrative Case 360 on February 2, 1998.

One copy of the proprietary information is provided to the Commission, and to the Attorney General, AT&T, MCI, and Sprint pursuant to Confidentiality Agreements signed by those parties in Case No. 94-121, Application of BellSouth Telecommunications, Inc. d/b/a South Central Bell Telephone Company to Modify its Method of Regulation.

The Commission's Order of October 25, 1999, requires service on parties to Case 94-121. In complying with that Order, BellSouth has consolidated certain entities where they had multiple names listed. Consultants were not served, only the entities they represented were served.

Helen C. Helton  
December 17, 1999  
Page 2

Ten edited copies are provided to the Commission and an edited copy is provided to all parties of record. Should any other party want a copy of the proprietary information, a copy will be provided pursuant to execution of an appropriate Protective Agreement.

Sincerely,

  
Creighton E. Mershon, Sr.

Enclosures

cc: Parties of Record

190427

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing was served on the individuals on the attached Service List by mailing a copy thereof, this 17th day of December 1999.

  
\_\_\_\_\_  
Creighton E. Mershon, Sr.

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COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

RECEIVED

DEC 17 1999

PUBLIC SERVICE  
COMMISSION

In the Matter of:

REVIEW OF BELL SOUTH TELECOMMUNICATIONS, ) CASE NO.  
INC.'S PRICE REGULATION PLAN ) 99-434

RESPONSE OF BELL SOUTH TELECOMMUNICATIONS

In its October 25, 1999 Order in this case, the Kentucky Public Service Commission ("Commission") directed BellSouth Telecommunications, Inc. ("BellSouth") to file a response by December 17, 1999. The requested response is to include not only BellSouth's response to the audit report, but also a productivity analysis, and any changes to the price regulation plan BellSouth may propose. Pursuant to the Commission's Order, the following is BellSouth's response.

RESPONSE TO THE AUDIT REPORT

The audit report accurately reflects BellSouth's performance under the price regulation plan, and effectively depicts the regulatory challenges facing the industry in the present as well as in the future<sup>1</sup>. In particular, BellSouth gives special endorsement to the following recommendations made by the auditors:

III-R2 More communication among the Commission, BellSouth, and other industry participants,

IV-R2 Revision of service objectives,

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<sup>1</sup> Although BellSouth is in general agreement with the auditors' findings and recommendations, BellSouth does have a differing position with respect to the auditors' recommendation to leave the three service categories as they are.

- V-R1 Removal of productivity index from the plan,
- VII-R1 Initiation of proceedings to 1) eliminate subsidies from retail rates, and  
2) de-average Unbundled Network Elements (“UNEs”), and
- VII-R2 Movement forward with rate re-balancing efforts.

The audit report is progressive in its recognition that BellSouth can play a positive role in the economic development of the Commonwealth. The current telecommunications marketplace affords Kentucky, the Commission, and the industry an opportunity that must be seized. As the auditors point out in Chapter III of the audit report (see pages 66 and 67), BellSouth already has an impressive record in its involvement with Kentucky's economic development through its many contributions and participation in projects like the Telecommunications Research Center and the Kentucky Information Highway (“KIH”). BellSouth welcomes the opportunity to work with the Commission and the industry in creating a climate that encourages additional investment and programs to enhance the economic health of the Commonwealth and to accomplish policy objectives the Commission identifies.

#### PRODUCTIVITY ANALYSIS

As stated above, BellSouth endorses the auditors' recommendation that the productivity index be eliminated from the plan. The auditors concluded that the productivity index is not relevant to today's marketplace and, indeed, in the long run, drives prices irrationally when competition in the residence marketplace is desired. BellSouth, therefore, agrees with the auditors' opinion (see page 120) that the productivity study should not be required. However, to be responsive to the

Commission's Order, BellSouth has attached the United States Telephone Association ("USTA") update to the Federal Communications Commission ("FCC") Total Factor Productivity ("TFP") methodology filed by the USTA for the industry at the FCC.

The FCC's 1997 Price Cap Order<sup>2</sup> established 6.5% as the annual X-factor, effective July, 1996. USTA, BellSouth and others appealed this aspect of the FCC's 1997 Price Cap Order. On May 21, 1999, the United States Court of Appeals for the District of Columbia Circuit<sup>3</sup> reversed and remanded the FCC's X-factor decision to the FCC. The remand was based on the fact that the FCC staff's interpretation of its own study results did not support an X-factor of 6.5%. The Court allowed the 6.5% X-factor to be applied while setting a deadline of April 1, 2000 for the FCC to respond. On November 15, 1999 the FCC adopted a rulemaking proceeding<sup>4</sup> seeking comment on the X-factor in the Price Cap LEC interstate pricing formula. The rulemaking proceeding seeks comments on alternatives to set the level of the X-factor, retroactively, for the remand period and prospectively.

Since the Kentucky Price Regulation Plan was adopted, much experience and expertise has been gained with productivity studies. BellSouth has been participating in an industry process (for large telecommunications companies) to develop industry-based productivity studies. Professor Frank M. Gallop previously filed a "Statement in Support of BellSouth Reply Comments" in the FCC's proceedings on the X-factor<sup>5</sup> indicating that the only appropriate way to set a "fair" X is on an industry basis. Based upon these

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<sup>2</sup> *Price Cap Performance Review for Local Exchange Carriers*, Fourth Report and Order in CC Docket No.94-1 and Second Report and Order in CC Docket No. 96-262, 12 FCC Rcd 16642 (1997) ("*1997 Price Cap Review Order*")

<sup>3</sup> *USTA v. FCC*, 188 F.3d 521 (D. C. Cir 1999) ("*USTA v. FCC*")

<sup>4</sup> FCC Docket No. 94-1; 96-262, *Further Notice of Proposed Rulemaking*, issued November 15, 1999.

<sup>5</sup> CC Docket No. 94-1, Reply comments of BellSouth, March 1, 1996; pp. 4 and 42 - 44.

proceedings, it is clear that superior performers compared to industry peers can reap the rewards of their efforts and weaker performers are pressured to try harder to catch up. ATT, MCI, Ad HOC, and the FCC have **all** been using **industry-based** TFP studies since 1996. In fact, in its May 1999 remand<sup>6</sup> of the 6.5% X-factor, the Court of Appeals for the District of Columbia upheld the FCC's position that "total company" was an appropriate basis for a TFP study. The Court rejected intervenor claims favoring an "interstate only" productivity analysis<sup>7</sup>. USTA and BellSouth strongly supported conducting an "X-factor" study only on a total company basis due to joint and common costs, mixed use of plant, and the arbitrariness of accounting separations.

As the auditors concluded, TFP studies are inherently backward looking. For example, the industry, and BellSouth in particular, have made significant improvements in headcount per 10,000 access lines as reflected in Table 1, but this major source of productivity gain is unlikely to continue in the future.

**Table 1: RBOC and BellSouth Improvement in Employees per 10,000 Switched Access Lines**

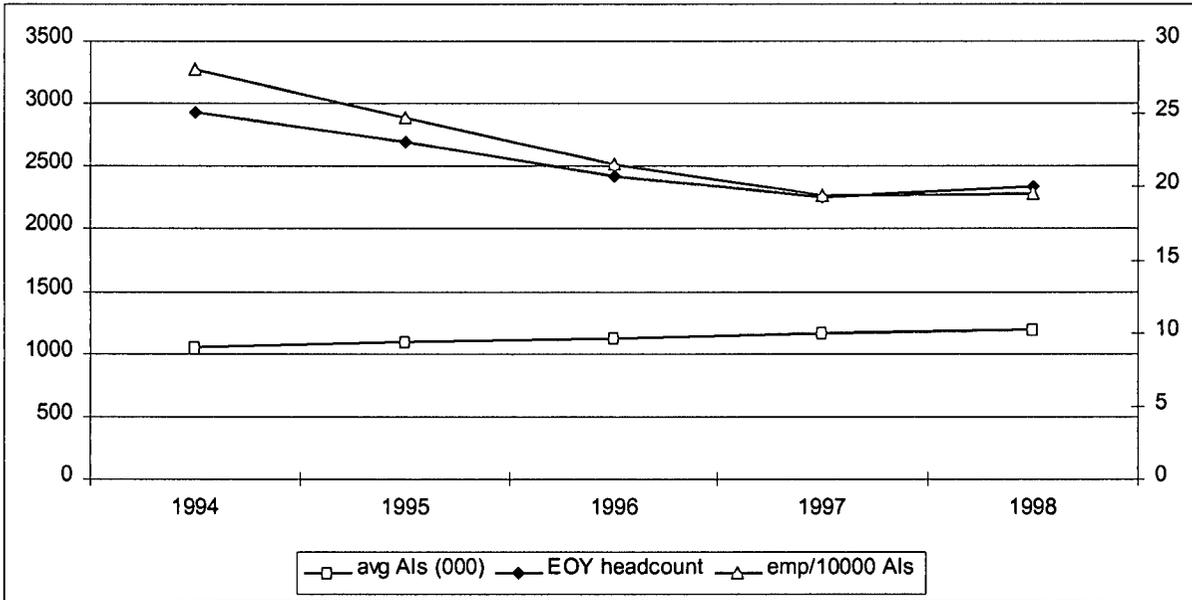
	Average of RBOCs Excluding BellSouth	BellSouth Region
End of 1992	36.49	42.51
End of 1998	25.16	23.76
Improvement	(11.33)	(18.75)

<sup>6</sup> *USTA v. FCC*

<sup>7</sup> *USTA v. FCC* ("In the first place it is not clear that "interstate productivity," as opposed to total company productivity, is measurable, or even economically well-defined. This is so because direct productivity measurement requires measurement inputs, and there is no obviously meaningful way to segregate LEC interstate and intrastate inputs because, as is undisputed, 'interstate and intrastate services are usually provided over common facilities.' 1997 Order, 12 FCC Rcd at 16,685, p 107. The Commission had previously recognized this analytical difficulty, questioning 'whether it would be possible to develop separate production functions for interstate and intrastate services,' *id.*, and it never unambiguously declared the issue resolved").

The following chart reflects the trend reversal in employees per 10,000 access lines for BellSouth in Kentucky.

**Kentucky -- End of Year Employm/10,000 access lines**

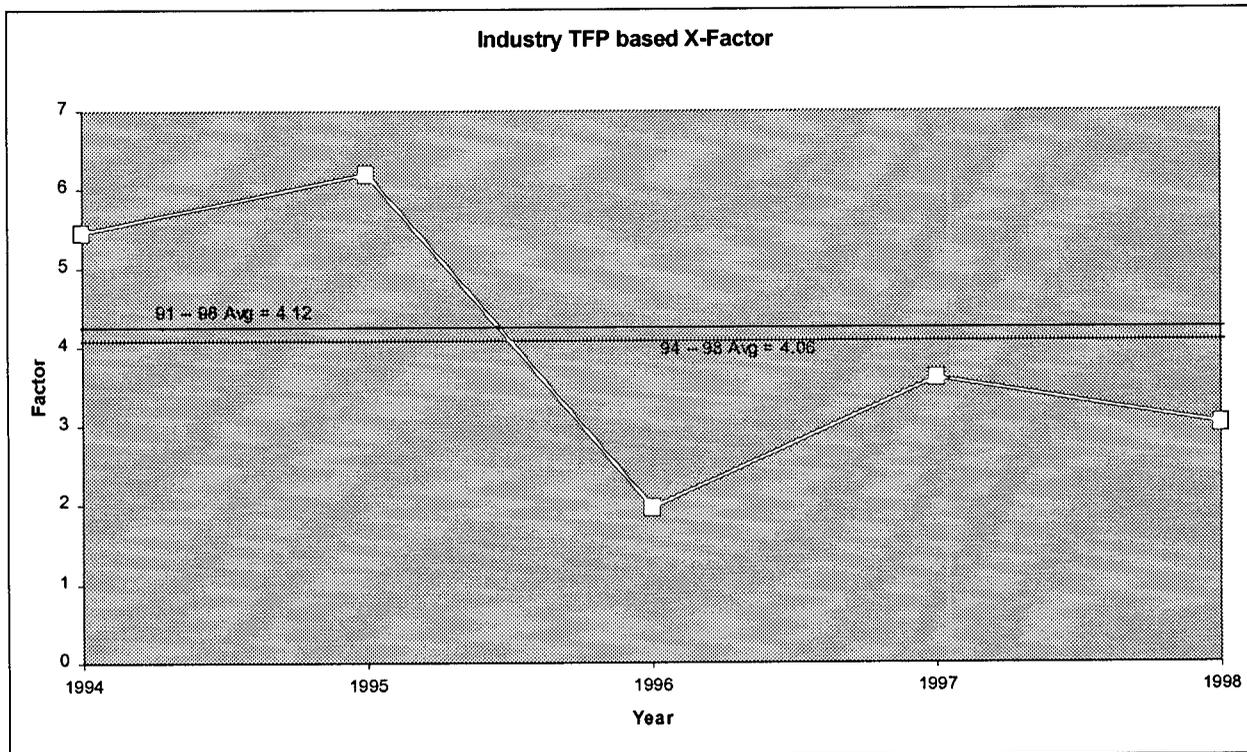


As the audit report indicates, the role of the X-factor should be supplanted by competition and market forces. This is particularly true now that the implementation of the Telecommunications Act of 1996 (“the 1996 Act”) has removed barriers to entry and allows Competitive Local Exchange Carriers (“CLECs”) to leverage off BellSouth’s economies of scale, as reflected in favorable wholesale prices and portable universal service support. Future profit margins will be pressured and market share losses will reduce BellSouth’s opportunity for productivity gains at its past pace and competition will ensure price benefits in lieu of any “X factor”.

On September 10, 1999, USTA made an Ex Parte filing<sup>8</sup> with the FCC updating the FCC X-factor methodology with BOC industry TFP data for 1998. This filing

<sup>8</sup> USTA Ex Parte, September 10, 1999 Docket No. 94-1 by Linda Kent of USTA (copy attached)

indicates industry productivity has been slowing from higher levels (when, as indicated above, headcount cuts were stronger) as shown in the following chart.



As a final consideration, the Coalition for Affordable Local and Long Distance Services ('CALLS')<sup>9</sup> filed a proposal<sup>10</sup> with the FCC on July 9, 1999 that is currently out for comment. That proposal included provisions to set the federal X-factor at inflation after accomplishing certain interstate access service pricing objectives. While this plan may be ultimately modified, it is another indication that industry participants recognize that the X-factor is inappropriate for the long term regulation of the rapidly changing telecommunications industry.

<sup>9</sup> CALLS members are AT&T, Bell Atlantic, BellSouth, GTE, Sprint and SBC.

<sup>10</sup> Ex Parte letter from John Nakahata of Harris, Wiltshire & Grannis, LLP to Ms. Magalie Roman Salas, Office of the Secretary Federal Communications Commission, July 29, 1999.

## PROPOSED CHANGES TO THE PRICE REGULATION PLAN

The regulation of BellSouth during the evolution to a fully competitive industry should take into account the critical aspects of the changing industry framework and the changing roles of both regulators and BellSouth. As regulators and the industry have developed the framework for the competitive local marketplace, numerous proceedings have produced decisions that impact the overall regulation of BellSouth and its contribution to the goals of the Commonwealth. BellSouth herein submits modifications to the current Price Regulation Plan ("PRP") entitled the BellSouth Transition Regulation Plan ("TRP"). The PRP provided a transition from earnings based Incentive Regulation to a more competitive framework in which prices rather than earnings were regulated as the industry moved toward a fully competitive, deregulated environment. The Transition Regulation Plan is simply the next step in transitioning toward the same end as the PRP but the competitive market has developed to the point that most retail prices can now be controlled by the market<sup>11</sup>. The Commission's focus can now shift to matters that foster and protect that competition. The TRP thus integrates the critical local competition issues and the relevant regulatory framework into a comprehensive plan that balances the needs of the Commission, BellSouth, its customers, and the industry.

On December 10, 1999, the Commission issued an Order in Administrative Case No. 360 addressing the cost model selection for the intrastate Universal Service Fund ("USF"). In addition, on that same date, the Commission opened two new Administrative Cases, Nos. 381 and 382, concerning the certification of the use of federal

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<sup>11</sup> The determination of deaveraged UNE prices and Universal Service support will establish price control in the residential market.

high cost support funds and the deaveraging of UNE prices, respectively. BellSouth will participate fully in these proceedings but hastens to point out that, while those matters can be separately evaluated, they are intrinsically linked in their effect on the marketplace. BellSouth's comprehensive TRP recognizes that intrinsic link and provides for the incorporation of these major decisions into BellSouth's regulatory framework. The plan is presented as a comprehensive resolution to the issues raised by the auditors and by the Commission's Orders, at least on an interim basis, until the Commission's administrative cases are completed. Specifically, BellSouth's TRP accomplishes the following:

- Deaveraged UNE prices.
- Lower non-recurring charges for UNEs.
- Certification of the federal USF amount and implementation of an intrastate USF without a separate line item on customers' bills.
- Rebalance of the BellSouth rate structure within the parameters of the current plan and, after the rebalance, a limit on basic residential increases to inflation rather than 10%.
- Elimination of the NTSRR.
- Ubiquitous opportunity for local competition.

Because BellSouth operates in a dynamically changing industry, it is important to craft a regulatory plan that looks beyond the present industry realities to the future telecommunications market in Kentucky.

Even though the current BellSouth PRP has been successful over the last four years, there is significant support to move across the continuum of regulation to a more

flexible regulatory environment for the retail marketplace while the "wholesale" market expands subject to market forces as envisioned by the 1996 Act. Logically, the regulators' focus should shift to the prices of services provided by BellSouth to other carriers, and to the quality of service provided by all competitors.

Respectfully submitted,



---

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PUBLIC SERVICE  
COMMISSION

## Introduction

The Kentucky Public Service Commission ("the Commission") has been forward looking and progressive in its approach to the regulation of BellSouth Telecommunications, Inc. ("BellSouth"). BellSouth's Price Regulation Plan ("PRP") was one of the significant steps taken by this Commission to move the industry and the Commonwealth to a more competitive marketplace. In its Order establishing the PRP, the Commission called for a focused management audit after four years to evaluate whether the plan met its stated objectives and whether any adjustments to the plan were necessary in the future. Vantage Consulting, Inc., ("Vantage") working for the Commission as a result of the Commission's Order, conducted a focused management and operations audit of BellSouth from April through October of 1999. In its report, Vantage states: "Our overall assessment of the PRP during the last four years concluded that it was effective, but now needed changes to reflect the industry transition to competition."<sup>1</sup>

In addition, other industry experts are advocating bold action as the pace of change in the industry accelerates. For instance, according to Cisco Systems: "There is a high probability that decades-old business models in the telecommunications industry will not survive in the New Internet Economy.<sup>SM</sup> Companies who wish to thrive in this New World of communications must adopt new ways of doing business."<sup>2</sup> Dr. Robert G. Harris, Professor Emeritus and former Chair of the Business and Public Policy Group

<sup>1</sup> Final Audit Report, Vantage Consulting, Inc. at p. 5.

<sup>2</sup> "Migrating to a New World Model", Cisco Systems Whitepaper, [http://www.cisco.com/warp/public/cc/cisco/mkt/servprod/tech/migra\\_wp.htm](http://www.cisco.com/warp/public/cc/cisco/mkt/servprod/tech/migra_wp.htm)

## BELLSOUTH TRANSITION REGULATION PLAN

at the Haas School of Business, University of California at Berkeley, and principal of the Law and Economics Consulting Group, Inc. ('LECG') states, "Given the extreme pace and dramatic nature of the changes in telecommunications, regulation that worked in yesterday's world will not work in today's or tomorrow's environment. As technological advances occur at an increasingly rapid pace, new entrants can quickly become serious competitors with lower costs. Immediate scale economies are no longer necessary for new competitors to either enter or expand. These changes necessitate a new, more flexible approach to telecommunications price regulation in Kentucky..."<sup>3</sup>

At the same time, Vantage recognized the intrinsic partnership between the Kentucky Commission and the Federal Communications Commission ("FCC") in carrying out the objectives of the Telecommunications Act of 1996 ("the 1996 Act"). Chapter VII of the Final Audit Report presents Vantage's "Platform Towards Deregulation". This "platform" considers the unbundled network element ("UNE") definition, pricing and the deaveraging of those prices, the effect of these items on BellSouth retail rates, and the rate rebalance and/or universal service support that results from accommodating competition under these conditions.

On December 10, 1999, the Commission issued an Order in Administrative Case No. 360 addressing the cost model selection for the intrastate Universal Service Fund ("USF"). In addition, on that same date, the Commission opened two new Administrative Cases, Nos. 381 and 382, concerning the certification of the federal high

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<sup>3</sup> "Regulation in the Dramatically Changing Telecommunications Environment", Robert G. Harris, June 30, 1999

## BELLSOUTH TRANSITION REGULATION PLAN

cost support funds and the deaveraging of UNE prices, respectively. BellSouth will participate fully in these proceedings, but hastens to point out that these issues are intrinsically linked in their effect on competition and prices in the marketplace. BellSouth's comprehensive TRP recognizes that intrinsic link and provides for the integration of these major decisions into BellSouth's regulatory framework. The TRP is presented as a comprehensive resolution to the issues raised by the auditors and by the Commission's Orders, at least on an interim basis, until the Commission's cases are completed.

The current plan is tariffed in Section A36 of the General Subscriber Services Tariff. The remainder of this document will be organized as a description and justification for modifications to the A36 Tariff (included as Attachment 1). As a result, the remainder of this document follows the outline provided on the following page.

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# BELLSOUTH TRANSITION REGULATION PLAN

## I. Modification of the Plan's objectives

The Vantage audit report recommends the addition of two objectives to the five existing objectives of the plan. These two objectives are to:

- Permit all BellSouth-KY retail rates to move towards incremental cost or market price.
- Ensure that the PRP does not hinder the potential introduction of competition to all markets in Kentucky.

The audit report states:

“The first new objective also has an impact on business rates, toll rates, vertical services and access charges. The benefit from this PRP objective is a KPSC realization that the entire BST-KY retail rate structure and its inherent subsidies need to be acted upon sooner rather than later.

The second proposed new objective simply assures all current and potential competitors within Kentucky that the PRP will not place them in an unfair competitive position with respect to BST-KY. It also reflects a view that no regulatory action, by itself, can force or guarantee that competitors will come into Kentucky and offer a full package of services to all customers, residential and business, regardless as their location, urban or rural.”<sup>4</sup>

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<sup>4</sup> Audit Report, p. 127.

## BELLSOUTH TRANSITION REGULATION PLAN

BellSouth believes that these two objectives are reasonable additions to the plan when taken together with the other modifications to the Plan proposed herein.

BellSouth's proposal includes a modest rate rebalance, the deaveraging of unbundled network element rates and the calculation of the intrastate universal service high cost support requirement. All of these proposals are in keeping with these new objectives.

### **II. Classifications of services, including tariff requirements and pricing rules**

As quoted above, industry experts and Vantage recognize that the industry is in transition as the 1996 Act is being implemented. Vantage also recommends that the Commission reevaluate its role in the future of the telecommunications industry.

The audit report found no reason to modify the existing three categories of service in the plan. BellSouth respectfully disagrees. The bulk of the Commission's activity in recent months and the bulk of the Commission's activity in the future will deal with facilitating competition, and administering the relationship between BellSouth and its competitor-customers. BellSouth, therefore, proposes to restructure the existing plan's three categories -- Non-competitive, Access and Competitive to three new categories -- Industrial, Access and Retail. The Industrial Category includes those areas where the Commission has spent the largest portion of its telecommunications time in recent months. BellSouth believes it is this category that will continue to involve the Commission most heavily in the future. Intrastate interexchange carrier access is a subset of the Industrial Category but has some characteristics of a retail service also. Due

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to the nature of the service, the separate access reform activities at the interstate level, as well as a continued commitment to mirroring access charges in Kentucky, access is left as a separate category. Finally, the retail category will be rate governed by the marketplace and the Commission's focus will transition to oversight of the quality of service.

### A. Industrial Services

The Industrial Services Category includes all services provided on a wholesale basis, as well as regulatory programs that are rate affecting but not services per se, such as, Lifeline and Universal Service. Intrastate Interexchange Carrier access charges, while included in this definition, are maintained in a separate category. Therefore, the Industrial Category includes Unbundled Network Elements (UNEs) rates, terms and conditions; resale discounts and conditions; intrastate Lifeline rates and procedures; and the intrastate Universal Service High Cost Fund.

#### 1. Unbundled Network Elements

BellSouth will provide all UNEs ultimately required by the Telecommunications Act of 1996. The Commission will approve the provision of UNEs through its role as approval authority of negotiated interconnection agreements, arbitrator of disputes arising out of the negotiation process resulting in arbitrated interconnection agreements, and in its role of complaint resolution (if any complaint arises regarding UNE provisioning).

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### a. UNE rates

Current UNE rates are those approved by the Commission in Case Nos. 96-348 and 96-482, the MCI and AT&T arbitration cases, respectively, and are cost based. There are at least two ways that newly approved rates would be available to CLECs. Rates as filed, for example, in a Statement of Generally Available Terms and Conditions ("SGAT") could be changed on sixty days notice and would be accompanied by an appropriate cost study. However, the rates embodied in interconnection agreements developed through negotiation and/or arbitration would only be changed subject to renegotiation or rearbitration as permitted by the existing agreements.

### UNE deaveraging

The FCC order issued on November 5, 1999 in CC Docket 96-98 requires the establishment of deaveraged UNE prices by May 1, 2000. Chapter VII of the audit report portrays the inherent relationship among UNE deaveraged prices, the size of the Universal Service Fund, and the Commission's establishment of a framework that sets the stage for statewide competition. The Commission's Order in Administrative Case No. 382 dated December 10, 1999, requires the establishment of three UNE zones, suggesting line density thresholds as the basis for establishing these zones. The result of this methodology when applied to BellSouth's wirecenters is included in Attachment 2. Briefly summarized, BellSouth used the data from Hybrid Cost Proxy Model (HCPM), or "synthesis" model, as proposed by the Commission in its Orders in Administrative Case ("AC") Nos. 360 and 382 dated December 10, 1999. Using the average density in lines per square mile for each BellSouth wirecenter, a weighted cost for the loops in those

## BELLSOUTH TRANSITION REGULATION PLAN

three zones was calculated. Ratios were developed from these costs to apply to the Commission's established BellSouth average UNE loop and NID price of \$20.00 resulting in deaveraged UNE loop rates of \$10.63, \$18.34 and \$43.67 for zones 1, 2 and 3, respectively.

BellSouth is not advocating that density based thresholds are the appropriate criteria for establishing UNE zones and, per the Commission's Order in AC382, may suggest and support a different methodology in its comments in January, 2000. In fact, BellSouth is in the process of developing a census of loop costs for BellSouth-served areas in the state. When completed, BellSouth will propose the substitution of these costs for the model results contained herein.

### TELRIC

The validity of the TELRIC methodology is currently before the Eighth Circuit Court. Until that matter is resolved, BellSouth will continue to support UNE rates with TELRIC studies. The Commission determined that the rates currently in effect for UNEs are cost based and meet the current TELRIC standards, and the Federal Court in Kentucky agreed. The audit report states that "non-recurring UNE costs represent a potential impediment to CLECs competing for BST-KY customers"<sup>5</sup> and that these costs "would be significantly less if bundled into platform UNE non-recurring charges."<sup>6</sup> BellSouth is in the process of developing updated non-recurring cost studies including studies for the "UNE platform". However, these studies will not be available in time to provide them with this plan. While Kentucky's non-recurring charges may be high

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<sup>5</sup> Audit Report , p. 138.

## BELLSOUTH TRANSITION REGULATION PLAN

relative to other states in the region, BellSouth believes they comply with applicable legal requirements. Nevertheless, to accommodate the auditors analysis and the fact that new studies for Kentucky are unavailable, BellSouth is willing to adopt the nonrecurring rates established in South Carolina since the South Carolina Public Service Commission made adjustments to BellSouth's TELRIC studies similar to those made by the Commission<sup>7</sup>. These non-recurring rates would apply until such time that updated cost studies are available and new rates are set. As explained below, South Carolina UNE loop and port non-recurring charges were incorporated in the USF development process. On a going forward basis, UNE rate changes will continue to be supported by cost studies that comply with the Telecommunications Act. Specific changes for any given CLEC are also subject to the terms of existing contracts.

### 2. Service Quality Measurements

BellSouth expects that the Commission will need to approve and monitor a set of Service Quality Measurements to fulfill their responsibility of ensuring CLEC parity going forward. BellSouth's Service Quality Measurements are included as Attachment 3, but will be replaced by the approved service parameters ultimately adopted by the Commission.

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<sup>6</sup> Ibid.

<sup>7</sup> Kentucky non-recurring charges for two wire loop are \$86.05 for the first line and \$58.57 for each additional line. The non-recurring charge for the unbundled exchange port for first and additional is \$37.78. The South Carolina rates are \$70.44, \$44.05 and \$24.98, respectively.

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### 3. Resale Discounts

The Industrial Category also includes the services provided to CLECs that are reselling BellSouth's services. Specifically, the discounts afforded to CLECs that resell BellSouth's residential and business services were established by the Commission in Case Nos. 96-348 and 96-482, the MCI and AT&T arbitration cases, respectively. To the extent that avoidable costs change, modification to the resale discounts could be proposed with appropriate cost support.

### 4. Universal Service

#### a. Universal Service Fund

##### 1. Intrastate USF Amount

BellSouth believes that the method for determining the amount of intrastate high cost support required from the USF is a function of comparing wirecenter costs to an appropriate benchmark. The audit report discusses the financial decision faced by CLECs in terms of rates paid by the CLEC for UNEs including a spread of non-recurring charges over a service life of 18 months. For purposes of this filing, BellSouth looked at the average revenue distribution in each wirecenter and included the difference between revenue received and the estimated charges for a deaveraged UNE as the universal service requirement for that wirecenter<sup>8</sup>. Port charges, a usage estimate, and a monthly

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<sup>8</sup> For purposes of this plan, BellSouth will use the Kentucky Commission's definition of subsidy (i.e., cost of universal service less the average revenues received per residential line). The use of this approach should not be construed as agreement that the Commission's definition is the correct economic definition.

## BELLSOUTH TRANSITION REGULATION PLAN

allocation of non-recurring charges based on three year average service life<sup>9</sup> were added to the deaveraged loop rate to determine the CLEC's UNE cost per zone.

The resulting amounts were:

	Zone 1	zone 2	zone 3
Loop	\$ 10.63	\$ 18.34	\$ 43.67
Port	\$ 2.61	\$ 2.61	\$ 2.61
Usage	\$ 5.46	\$ 5.46	\$ 5.46
Non-recurring	\$ 2.10	\$ 2.10	\$ 2.10
Total	\$ 20.80	\$ 28.51	\$ 53.84

An initial per line support amount was determined by subtracting the wirecenter revenue from this deaveraged UNE charge. In addition, the federal support available by wirecenter was subtracted from this initial amount to establish the intrastate universal service fund requirement. The amount for this fund for BellSouth is \$24.9M (see Attachment 4). The size of this fund could be determined in other ways. Comparing wirecenter revenues to total wirecenter costs results in a larger fund. Comparing wirecenter costs to a statewide revenue benchmark could result in an even larger fund. The Commission has expressed concern that a USF based on these methodologies could produce a line item surcharge as much as \$4 to \$5<sup>10</sup>. The fund determination mechanism presented herein is a transitional methodology which generates lower deaveraged UNE rates and a high cost USF that can be handled through rate rebalancing rather than a line item on the bill. The Commission may need to revisit USF funding levels after seeing how the market responds to this transitional step. However, given the

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<sup>9</sup> Audit recommendations, Chapter VII, in general. The audit report uses 18 months as an estimate for churn. BellSouth used 36 months in its analysis.

## BELLSOUTH TRANSITION REGULATION PLAN

Commission's requirement to establish UNE zones by May 1, 2000, this mechanism allows the Commission to deaverage UNE rates and establish USF funding requirements consistent with the deaveraging decision and with the auditors' discussions of CLEC cost/pricing considerations.

### 2. Rate Rebalance

Consistent with the mechanism above, BellSouth proposes a two year rebalance plan in which the subsidy identified above is eliminated through phased-in increases to residential services, offset by reductions to access charges (NTSRR) and other rates. Residential rates will be increased no more than 10% per year for two years equalling the necessary amount of high cost support. The NTSRR will be eliminated in the first year. The remaining offsets necessary to ensure the revenue neutrality of the subsidy shift will be specified at the time of actual rate filings with a 30 day approval interval. After the residential increases are completed at the end of year two, residential rates will be subject to increases limited by inflation (as measured by the GDPPI). Given that specific rate changes are not included, BellSouth has not made any public notice of these proposed rate changes. Any increase up to 10%, however, is within the parameters of the current plan that was approved by the Commission in 1995 after due notice and public hearing. In addition, BellSouth is proposing a May 1, 2000 implementation date to facilitate the Commission's UNE deaveraging requirement. If the Commission believes additional notice is required, adequate time is available for such notice.

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<sup>10</sup> Order in Administrative Case 360, *An Inquiry Into Universal service and Funding Issues*, December 10, 1999, p. 6.

## BELLSOUTH TRANSITION REGULATION PLAN

### 3. Federal High Cost USF Offset

The Federal Universal Service High Cost Fund amount as established by the FCC in its order of November 2, 1999 in CC Docket No. 96-45 has been included in the determination of the size of the intrastate fund. The FCC concluded that it would provide federal support in the form of carrier revenues and left to the states the decision of how the support is used to advance the goals set out in section 254(e) of the Act. The FCC further stated that:

“A state could also require carriers to use the federal support to upgrade facilities in rural areas to ensure that services provided in those areas are reasonably comparable to services provided in urban areas of the state.”<sup>11</sup>

Consistent with that statement and the audit recommendations for a commitment to economic development, BellSouth proposes to utilize a portion of the first year of the federal support for infrastructure improvement in selected counties in the state. BellSouth's proposed infrastructure improvement will be used to provide diverse transport facilities. These diverse interoffice facilities will provide survivable ring architecture commonly found in Kentucky's major cities and core transport networks. Utilization of the federal support for this purpose will provide these areas with improved telecommunications reliability as a new selling point for use in attracting businesses to these rural areas. Additionally, this infrastructure upgrade will aid in providing increased transport capacity necessary to support the demands of higher bandwidth data services. The details of the

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<sup>11</sup> FCC99-306, para 96

## BELLSOUTH TRANSITION REGULATION PLAN

proposal are included in Attachment 5 and amounts to \$5,090,000. The remainder of the federal support will be used to reduce NTSRR ( $\$11,912,952 - \$5,090,000 = \$6,822,952$ ). The remainder of the \$14,200,000 NTSRR will be eliminated in the rebalance as mentioned above.

BellSouth realizes that the Commission is required to certify to the FCC that federal funds will be used appropriately before such funds will be distributed. BellSouth hereby submits the attached plan as the basis for the Commission's certification which should be filed with the FCC prior to April 1, 2000. BellSouth will comply with the requirements of the Commission's order in AC381 issued December 10, 1999. Incorporation of the information in this plan enables the Commission to evaluate the relationship of the infrastructure commitment as a partial offset to federal high cost support, to the rebalance, and to the establishment of an intrastate high cost USF.

#### 4. Assessment Methodology

From a policy standpoint, BellSouth believes that implicit subsidies should be replaced with explicit support and/or rate rebalancing. However, in this case, BellSouth is willing to live with a partial solution to the subsidy problem because the overall package that BellSouth is proposing has so many other positive aspects that will jump-start the state in its transition to a fully competitive environment. BellSouth is therefore proposing in this package a temporary solution to universal service that will leave some of BellSouth's implicit subsidies intact. However, BellSouth's plan will make subsidies explicit for eligible CLECs that serve high cost areas in Kentucky. If BellSouth receives

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the other components of this comprehensive package, including the rate rebalancing it has proposed, then BellSouth would be willing to forgo receiving any distributions from the state high cost universal service fund. It makes this offer in the interest of facilitating an overall solution that is acceptable to the Commission. BellSouth's offer to forgo receipts from the state USF would largely eliminate the need for a separately defined intrastate universal service fund collected via a line item on the BellSouth bill. There are, however, competitive concerns that must be resolved. There might not be a lot of competition for residential consumers in the high cost areas without a portable universal service fund. Thus, BellSouth would be in favor of an explicit USF that would provide support to any LEC that provides service in a high cost area. As noted above, BellSouth would voluntarily forgo any receipts from the fund in order to keep the fund size as small as possible. The derivation of the subsidy requirement by wirecenter identifies an amount of support by wirecenter that a CLEC should receive if they win a customer. Essentially, as a result of the rebalance/USF proposal presented herein, there is no explicit state high cost USF established in BellSouth's territory unless and until a CLEC (that is designated as an Eligible Telecommunications Carrier ("ETC")) wins a customer in an intrastate supported wirecenter. At that time, BellSouth and all other entities assessed for intrastate Universal Service purposes, should pay the necessary amounts to the fund administrator that will enable the necessary support payments to the eligible CLEC. This creates the need for reporting the quantity of lines served by wirecenter to the fund administrator by each ETC. The FCC order establishing the Federal USF also requires reporting. The

## BELLSOUTH TRANSITION REGULATION PLAN

Kentucky Commission may wish to dovetail its reporting requirements with the federal requirements.

BellSouth believes that creating a fair economic environment for its wireline competitors is a requirement of the 1996 Act. Therefore, it has proposed a solution that would ensure that eligible CLECs using UNEs in high cost areas could compete against BellSouth's current prices. In effect, the explicit universal service support, when added to the average revenues received in a given wire center, should ensure the CLEC is made whole and can cover its cost of purchasing UNEs.

BellSouth notes that its temporary universal service approach may need to be reexamined if competition begins to significantly undermine the support that BellSouth relies upon to fund universal service. Once competition reaches that point, a more permanent solution for universal service will be needed. However, BellSouth commits that it will live with the temporary solution proposed in this plan for at least two years.

BellSouth realizes that the Commission must deal with these issues for GTE and Cincinnati Bell and eventually for the rural companies in the state. BellSouth's proposal eliminates the need for a line item for BellSouth's own customers. However, in the event the other ILECs do not, or cannot, make similar proposals, BellSouth may need to establish a line item to collect support for these other companies.

### b. Lifeline

A second universal service requirement is Lifeline support. The Commission will continue to establish the requirements for, and oversee the operation of, Lifeline in Kentucky. As an initial matter, whether and to what extent the Lifeline credit and

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surcharge in Kentucky should be adjusted as a result of the decisions regarding high cost support must be considered. BellSouth proposes that unless a specific high cost line item is required, that Lifeline customers rates be increased along with general residential increases. If a line item amount is established, the Lifeline credit could be commensurately increased which, in turn, will affect the amount of the Lifeline surcharge. In addition, the Commission has authority over qualifications for Lifeline as well as the conditions for Lifeline portability.

### **B. Intrastate Access Services**

#### 1. Non Traffic Sensitive Revenue Requirement (NTSRR)

The NTSRR currently billed to interexchange carriers is approximately \$14M.

The rebalance proposal eliminates this charge.

#### 2. Mirroring provisions

BellSouth will continue to mirror interstate access rates until the intrastate switched access composite rate is .0055 per end (or the rate target that results from the FCC's consideration of the CALLS proposal). As with the current plan, BellSouth will mirror any interstate rate change within 30 days of the approval of the rate change by the FCC. Tariffs can be approved on as short as one day's notice.

### **C. Retail**

In general, the framework established in this plan allows for fair competitive entry into the Kentucky market and as a result BellSouth's rates will be market constrained. Consistent with the rationale presented in the audit report, establishing a framework for competition does not and should not guarantee competition. BellSouth believes that the

## BELLSOUTH TRANSITION REGULATION PLAN

framework proposed herein does make all retail operations subject to competition. However, in recognition that residential competition may develop more slowly than business competition and to avoid the rate shock of full rebalance or a large high cost USF, BellSouth proposes a transition for residential customers.

### 1. Residential Service provisions

As generally indicated above, residential basic rates will be increased by amounts not to exceed 10% per year over two years beginning May 1, 2000. Beginning May 1, 2002 they may be increased, but by no more than the level of inflation for the most recent 12 month period as measured by the GDPPI and for which GDPPI results are available. This approach allows for a non-rate shock approach to shifting the subsidy inherent in the present rate structure, eliminates the need for an intrastate high cost fund and the associated line item billing requirement. It also is consistent with the added plan objective of moving all prices toward incremental cost.

BellSouth did not make any public notice of these proposed rate changes as they are within the parameters of the current BellSouth plan which was approved by the Commission after due notice and public hearing.

### 2. Provisions for all other retail services

All other retail services are subject to market constraints or are discretionary services and as a result, have no pricing rules.

Tariff changes for the services in the Retail category will be "presumptively valid", i.e., filed and approved with one-day notice. Similar to the treatment for other market participants, no cost support will be required for tariff filings in this category.

## BELLSOUTH TRANSITION REGULATION PLAN

Service objective results for this category will be updated to include three measurements – percent of regular requests filled within 5 days with an objective of 90%, speed of answer for repair with an objective average time of 20 seconds or less, and percent out-of-service troubles cleared in 36 hours with an objective of 85%. This latter measurement is a change from 24 hours to 36 hours based on the audit report. This update to the required service measurements recognizes the changes in technology which have made the remaining measurements in the Commission's regulations obsolete for BellSouth. As a result, upon approval of the attached TRP tariff, the other measurements currently in the Commission's regulations will no longer be reported for BellSouth in accordance with audit recommendations. The existing quarterly financial reporting requirement will be eliminated. An annual report will be required to the extent that all telecommunications entities are required to file such reports.

### III. Productivity Issues

#### A. Audit findings

In Chapter V of the audit report, the auditors take issue with the effectiveness of a Total Factor Productivity measurement as an appropriate tool for future regulatory oversight and recommend that the productivity factor be eliminated for the Price Regulation Plan.<sup>12</sup> BellSouth agrees with the auditors' findings that TFP has outlived its usefulness as a regulatory tool and that the Commission's policy objectives are better accomplished in other ways. Nevertheless, the Commission's order of October 25, 1999

## BELLSOUTH TRANSITION REGULATION PLAN

in Case No. 99-434 requires that BellSouth file a Total Factor Productivity study by December 17, 1999. BellSouth is incorporating herein as Attachment 6, the most recent USTA industry update to the Federal TFP methodology. However, the FCC decision to set the X-factor at 6.5% based on this methodology was appealed to the Circuit Court for the District of Columbia and determined to be unjustified. The Court remanded the matter back to the FCC. The FCC has issued a Further Notice of Proposed Rule Making (FNPRM) on various ways to modify the FCC's TFP methodology.

Despite the questionable validity of the 6.5% X-factor based on the FCC methodology, the recent USTA update indicates that industry productivity is trending down. In addition, BellSouth reiterates the audit findings that:

- The TFP index was never intended to be a predictor of future productivity.
- TFP measures the total industry or a firm's overall productivity. It does not differentiate input versus output driven productivity gains or short-term versus long-term productivity gains.
- Multi-regional and multi-product or service firms with significant common facilities cannot accurately disaggregate productivity by region or service level.

BellSouth also points out that the Commission has approved a price regulation plan for Cincinnati Bell by order dated July 26, 1999 in Case No. 98-292 without any productivity driven formulas. Therefore, while the industry study is supplied in order to

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<sup>12</sup>BellSouth does not agree with all the points raised by the auditors in Chapter V. For instance, the auditors recommend the retention of a non-competitive basket. BellSouth believes the framework proposed herein eliminates the need for a non-competitive category.

## BELLSOUTH TRANSITION REGULATION PLAN

comply with the Commission's order, there are no pricing formulas in BellSouth's proposal. No use is made of the TFP study, nor is any relationship drawn between the study results and the Commission's previous 4% productivity offset. Consistent with audit recommendations and findings, BellSouth proposes to commit to certain infrastructure improvements and economic development endeavors that further the Commission's policy objectives. BellSouth expects that this commitment coupled with the commitment to reduce access charges will go beyond the original intent of the productivity factor in the current plan.

### B. Current Industry study

The USTA update to the FCC methodology incorporates 1998 data. Based on that update the 1998 federal X factor is 3.03 and the 1994 – 1998 average is 4.06. (See Attachment 6)

### C. Infrastructure/Economic Development Commitment

As indicated in the audit report, "Vantage suggests a cooperative approach between the Commission, state government, and BellSouth whereby the parties work together to determine telecommunications goals and visions and then identify specific projects and infrastructure goals to meet those goals."<sup>13</sup> Using these common goals and objectives, BellSouth would commit to implement appropriate infrastructure and economic development initiatives that work towards accomplishing these objectives. As an example, BellSouth would be interested in developing a framework for improving economic development incentives, high speed internet access in non-urban areas, and

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<sup>13</sup> audit report, p. 120

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educational opportunities. Using these three very important objectives, the Commonwealth could move ahead of other states with positive incentives in place for telecommunications companies in the state. An illustrative Economic Development Tariff is attached. (See Attachment 7)

**IV. List of Services by Category (see attached tariff)**

**V. Annual Filing Requirements**

A report will be filed annually on the anniversary of the plan that summarizes all activity that has occurred under the plan such as price changes, previous 12-month GDPPI results, and economic development infrastructure activity. In keeping with the auditors' recommendation for a more open dialogue, the Commission's staff and interested stakeholders can mutually develop the format and content of a meaningful progress report.

**Attachment 1 – Transition Regulation Plan (TRP) Tariff**

**Attachment 2 – UNE Deaveraging**

**Attachment 3 – Service Quality Measurements**

**Attachment 4 – Intrastate High Cost Universal Service Fund – Detailed Analysis**

**Attachment 5 – Infrastructure Proposal for Federal High cost offset**

**Attachment 6 – USTA TFP study update**

**Attachment 7 – Economic Development tariff**

Attachment 1:

Transition Regulation Plan Tariff

BELLSOUTH  
TELECOMMUNICATIONS, INC.  
KENTUCKY  
ISSUED: December 17, 1999  
BY: E.C. Roberts, Jr., President - KY  
Louisville, Kentucky

GENERAL SUBSCRIBER SERVICES TARIFF

PSC KY. TARIFF 2A  
First Revised Page 1  
Cancels Original Page 1  
EFFECTIVE: May 1, 2000

## A36. PRICE REGULATION PLAN

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## A36. PRICE REGULATION PLAN

### A36.1 Company Price Regulation Plan

#### A36.1.1 General

- A. The following rules shall govern the operations of BellSouth Telecommunications, Inc. (the Company) and its regulation by the Kentucky Public Service Commission (the Commission). This Tariff applies to all regulated services filed with the Commission as listed in A36.1.4.
- B. Objectives of the Price Regulation Plan (the Plan).  
The objectives of the Plan shall be to:
1. Ensure basic service continues to be available at reasonable rates, and shield the basic ratepayer from significant price increases resulting from the changing marketplace.
  2. Continue to provide high quality service.
  3. Permit the Commission and the Company to direct their energies to meet customer's needs and enhance efficiency in the provision of telecommunications services throughout Kentucky.
  4. Provide enhanced incentives to invest in new technologies and services.
  5. Permit the Company the added flexibility to price competitive services, set depreciation rates, and respond to a changing marketplace.
  6. Permit all Company retail rates to move toward incremental cost or market price. (N)
  7. Ensure that the potential introduction of competition to all markets in Kentucky is not hindered by the Plan. (N)

#### A36.1.2 Definitions

- A. Term - There is no defined term for this Plan.
- B. Classification of services - There are three service categories: 1) *Industrial*, 2) *Access*, and 3) *Retail*. See A36.1.4 for the classification of each existing Company service into one of the three service categories. (C)
1. *Industrial* services are those *non-access* services *that are provided on a wholesale basis to other telecommunications companies (these include Unbundled Network Elements [UNEs] and the resale discount). Also included in the industrial category are Lifeline rates and the Universal Service Fund (USF) rate elements.* (C)
  2. *Access* services are the interconnection and access services commonly purchased by other telecommunications providers. (C)
  3. *Retail* services are all other services that are not classified as *Industrial or Access* services. (C)
- C. New Service - A new service is a function, feature, capability, facility, or combination of these, which previously has not been offered.

#### A36.1.3 Regulations

- A. Changing Classification
1. The Company is permitted to reclassify services by applying to the Commission. The Commission has thirty (30) days to review the request for reclassification and either approve or suspend the request. If the Commission takes no action within thirty (30) days, the reclassification is deemed approved. When a request for reclassification is suspended, Commission regulations and Kentucky law are applicable to any further Commission action.
- B. Tariff Requirements
1. Terms and conditions of existing tariffed services are deemed approved and govern the contractual relationship between the Company and its customers.
  2. All services must cover long run incremental costs except as noted in A36.1.3.B.3.
  3. The Company may in good faith file for prices below long run incremental cost to meet the equally low price of a competitor. The Company shall file evidence that competitors are charging rates below the Company's long run incremental cost for the service. If the competitive price threat vanishes, within thirty (30) days, the Company shall increase its price to cover the long run incremental cost of the service. (M)

## A36. PRICE REGULATION PLAN

### A36.1 Company Price Regulation Plan (Cont'd)

#### A36.1.3 Regulations (Cont'd)

##### B. Tariff Requirements (Cont'd)

4. The Company shall file tariffs stating the rates, terms and conditions for all new services *and for changes to existing services*. Such filings for new services will also designate the proposed category and rationale for the designation. *For new services or proposed changes to existing services in the Industrial and Access categories*, the Company shall file with the Commission a long run incremental cost study, demonstrating that the proposed price does not result in a price below long run incremental cost of the service, except as indicated in 3 preceding. *Unless requested by the Commission or staff, no cost studies will be required for new services or proposed changes to existing services in the Retail category.* (M)(C)
5. *All proposed tariffs and promotions will be presumed valid on the calendar day following the file date.* The Commission may, on its own motion, or in response to a petition from an interested party, suspend a new service offering for good cause if the terms and conditions result in public interest concerns. Such investigation shall be initiated within thirty (30) days after the tariff is filed. The Commission shall make a good faith effort to expedite the investigation but shall retain full statutory authority to investigate such issues and to extend the time for the investigation, if necessary. Should the Commission find during the investigation period that a price is inappropriate, the Company may, at the Commission's direction, implement retroactive treatment back to the date the Company offered the service. (C)
6. (DELETED)
7. In the case of CSA arrangements or Special Assembly filings in order to meet a customer desired due date (CDDD), service may be installed upon the signing of the contract by the customer. The contract will contain the following phraseology:

"This contract is subject to the approval of the Kentucky Public Service Commission. In the event the Commission should modify any rate or provision of this agreement, the customer will have the option of accepting the modification(s) or of canceling the contract. If accepted, billing will be rendered from the installation date."

The Company will render billing from the date the service is installed but not until after the Commission has approved the contract. In addition, if the Commission changes the price, the customer will have the right to accept or reject the new price. Customer acceptance of the new price explicitly includes billing the price as of the installation date. Should a customer refuse the service at a PSC authorized price, the Company will be required to disconnect the service.

##### C. Pricing Rules

1. *Industrial* Category (C)
  - a. Rate changes will take effect *on the calendar day following the file date.* (C)
  - b. The prices in effect on *January 1, 2000 for services in this category will remain in effect until proposed rate adjustments are approved by the Commission. Proposed rate adjustments will be accompanied by supporting cost information.* (C)

BELLSOUTH  
TELECOMMUNICATIONS, INC.  
KENTUCKY

GENERAL SUBSCRIBER SERVICES TARIFF

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Louisville, Kentucky

## A36. PRICE REGULATION PLAN

### A36.1 Company Price Regulation Plan (Cont'd)

#### A.36.1.3 Regulations (Cont'd)

##### C. Pricing Rules (Cont'd)

##### 1. (DELETED)

c. (DELETED)

d. (DELETED)

e. (DELETED)

f. (DELETED)

g. (DELETED)

(D)

(D)

(D)

(D)

(D)

(D)

## A36. PRICE REGULATION PLAN

### A36.1 Company Price Regulation Plan (Cont'd)

#### A36.1.3 Regulations (Cont'd)

##### C. Pricing Rules (Cont'd)

###### 1. (DELETED)

###### h. (DELETED)

###### i. (DELETED)

###### 2. Access Service Category

- a. Rate changes will take effect on the calendar day following the file date. (N)
- b. Intrastate switched access rates shall mirror the interstate rates for all future changes effective no later than 30 days after the approved FCC interstate tariffs. *Tariffs will be filed to reflect these changes.* (C)
- c. The prices in effect on January 1, 2000 for other services in this category will remain in effect until the Commission approves proposed rate adjustments. Proposed rate adjustments will be accompanied by supporting cost information. (N)

###### 3. Retail Service Category

- a. Rate changes will take effect on the calendar day following the file date. (N)
- b. The Company shall have full discretion to set the rates, terms and conditions for services in this category based on its assessment of market conditions, *except as specified in c following.* (C)
- c. The prices in effect on December 31, 1999 for certain residential services will be increased by no more than 10 percent effective May 1, 2000. The prices in effect for these services on April 30, 2001 will be increased by no more than 10 percent effective May 1, 2001. (N)

Annual adjustments to Basic Residential Service rates after April 30, 2002 will be no more than the annual rate of inflation as measured by the change in the Gross Domestic Product Price Index (GDP-PI). (N)

Increases to individual Basic Residential Service rates are limited to 10 percent in any May – April period. (N)

##### D. (DELETED)

##### E. Financial Reports/Monitoring

1. The Company shall submit a summary of monthly service objectives *for the state and for each district as follows:* (C)
  - a. Percent of requests for regular service fulfilled within five (5) working days unless applicant specifically requests a later date. Objective = 90 percent (N)
  - b. Average speed of answering time for calls to repair service. Objective = 20 seconds or less (N)
  - c. Percent out-of-service troubles cleared within 36 hours unless the customer requests a later date. Objective = 85 percent (N)
2. *For 1.a and 1.c,* the Company's report will also identify exchanges that do not meet the service objectives. If the Company's performance levels for any exchange fall below minimum service objectives for two consecutive months, the Company shall submit a report setting forth the specific action taken (or planned) to correct its performance. (C)
3. No other service objective measurements are required. (N)
4. The Company may establish depreciation rates at its discretion. The Company shall submit to the Commission copies of its depreciation filings with the Federal Communications Commission ("FCC"). (T)
5. The Company shall file *the same* annual financial reports *that all telecommunications companies are required to file.* (C)

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## A36. PRICE REGULATION PLAN

### A36.1 Company Price Regulation Plan (Cont'd)

#### A36.1.3 Regulations (Cont'd)

##### F. (DELETED)

(D)

#### A36.1.4 List of Services by Category

##### A. *Industrial* Category

(C)

Lifeline

(N)

Resale Discount

(N)

Unbundled Network Elements (UNEs) (Not tariffed)

(N)

Universal Service Fund (USF)

(N)

##### B. *Access* Category

(M)

BellSouth® SWA 500 Service - Personal Communication Service

(M)

BellSouth® AIN SMS Access Service

(M)

BellSouth® AIN Toolkit Service

(M)

Access Line Service For Payphone Service Provider Telephones

(M)

BellSouth® Billing Name and Address for ANI

(M)

Carrier Common Line Access Services

(M)

Common Switching Optional Features

(M)

BellSouth® Custom Network Service

(M)

BellSouth® Customer List Service

(M)

Dedicated Network Access Lines

(M)

DID/DOD with BellSouth® SWA LSBSA

(M)

Digital Data Access (a.k.a. BellSouth® SPA DS0 Digital Data) Service

(M)

BellSouth® Directory Assistance Access Service

(M)

Engineering and Miscellaneous Services

(M)

High Capacity

(M)

Interconnection for Mobile Services<sup>1</sup>

(M)

BellSouth® SWA LSBSA

(M)

Local Switching

(M)

Network Blocking for BellSouth® SWA FGD

(M)

Operator Services Access Service

(M)

Shared Network Arrangement

(M)

Sharing and Resale of Basic Local Exchange Service

(M)

SmartLine® for *Customer-provided Public Telephone* Subscribers

(M)(C)

Special Access (a.k.a. BellSouth® SPA) Services

(M)

Switched Basic Service Elements (BSEs)

(M)

BellSouth® SWA Service (Non-BSE)

(M)

BellSouth® SWA Transport

(M)

Note 1: A35.1 - A35.3 only.

(M)

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## A36. PRICE REGULATION PLAN

### A36.1 Company Price Regulation Plan (Cont'd)

#### A36.1.4 List of Services by Category (Cont'd)

C. <i>Retail</i> Category	(C)
911 Emergency System & A Key System	(M)
AccuPulse	(M)
Addition of Blocking Options to ESSX <sup>®</sup> and Digital ESSX <sup>®</sup> service Tariffs	(M)
Additional Listing	(M)
Announcement Facilities	(M)
Answer Supervision	(M)
Area Communication Service	(M)
Area Number Calling Service	(M)
Area Plus <sup>®</sup> Service	(M)
Area Plus <sup>®</sup> Service with the Complete Choice <sup>®</sup> Option	(M)
Arrangements for Night, Sunday, Holiday Service	(M)
Automatic Number Identification	(M)
Back-up Line	(M)
BellSouth <sup>®</sup> Administrative Management Service	(M)
BellSouth <sup>®</sup> AIN Virtual Number Call Detail <sup>®</sup> Service	(M)
BellSouth <sup>®</sup> Business Choice <sup>®</sup> Package Service	(M)
BellSouth <sup>®</sup> Business Plus <sup>®</sup> Service	(M)
BellSouth <sup>®</sup> Centrex service	(M)
BellSouth <sup>®</sup> Channelized Trunks	(M)
BellSouth <sup>®</sup> Complete Choice <sup>®</sup> For Business Package	(M)
BellSouth <sup>®</sup> Dedicated Ring	(M)
BellSouth <sup>®</sup> Primary Rate ISDN	(M)
BellSouth <sup>®</sup> SWA WATS	(M)
BellSouth <sup>®</sup> Video Conferencing Service	(M)
Billing and Collections Services	(M)
Break in Rotary Number Group	(M)
Broadband Exchange Line Service	(M)
Business State Wide Rate Schedule (Flat, Measured, Message and ACS)	(M)
Call Detail Information	(M)
Charge for Extracting and Processing Call Detail Information for Law Enforcement Subpoena Requests	(M)
Charges for Unusual Installation	(M)
Coin Refund and Repair Referral Service	(M)
Commercial Quality Video (a.k.a. BellSouth SPA Commercial Quality Video)	(M)

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## A36. PRICE REGULATION PLAN

### A36.1 Company Price Regulation Plan (Cont'd)

#### A36.1.4 List of Services by Category (Cont'd)

C. <i>Retail</i> Category (Cont'd)	(C)
Complete Choice <sup>®</sup> Service	(M)
Conduit Occupancy	(M)
Conference Service	(M)
Connectionless Data Service (a.k.a. BellSouth Exchange Access Connectionless Data Service)	(M)
CourtesyComplete <sup>®</sup> Service	(M)
CrisisLink <sup>®</sup> Service	(M)
Custom Calling Services	(M)
Customized Code Restrictions	(M)
Data Transport Service Access Channel Service	(M)
Derived Data Channel (a.k.a. BellSouth SPA Derived Data Channel) Service	(M)
Digital Electronic Tandem Switching Features	(M)
Digital ESSX <sup>®</sup> service	(M)
Direct-Inward Dialing (DID) Service	(M)
Directory Assistance (Local)	(M)
Directory Assistance Call Completion (DACC)	(M)
Directory Assistance Database Services	(M)
Directory Assistance - IntraNPA Long Distance Directory Assistance	(M)
Directory Publishers Database Service	(M)
Dual Service	(M)
Electronic White Pages	(M)
Emergency Reporting Services	(M)
Equipment for Disabled Customers	(M)
ESSX <sup>®</sup> Service	(M)
ESSX <sup>®</sup> Multi-Account service	(M)
ESSX <sup>®</sup> ISDN service	(M)
Exchange Access Connectionless Data Service (a.k.a. BellSouth Exchange Access Connectionless Data Service)	(M)
Exchange Access Frame Relay Service (a.k.a. BellSouth Exchange Access Frame Relay Service)	(M)
Extension Service (Channels for) and Tie Lines	(M)
Foreign Central Office Service	(M)
Foreign Exchange Service	(M)

### A36. PRICE REGULATION PLAN

#### A36.1 Company Price Regulation Plan (Cont'd)

##### A36.1.4 List of Services by Category (Cont'd)

C. <i>Retail</i> Category (Cont'd)	(C)
Frame Relay Service (a.k.a. BellSouth Exchange Access Frame Relay service)	(M)
Grouping Service	(M)
High Voltage Protection	(M)
Hot Line Service	(M)
Improved Mobile Telephone Service (IMTS)	(M)
Information Delivery Service (976 Dial-It)	(M)
Integration Plus Management Service (IPMS) (FlexServ (a.k.a. BellSouth® SPA Customer Reconfiguration), NUIS)	(M)
Interconnection	(M)
Inter-Switch Simplified Message Desk Interface	(M)
IntraLATA Long Distance Operator Verification/Interruption Service	(M)
IntraNPA LD Operator Service Req. TN Assistance	(M)
Intro Native Mode LAN Interconnection Service	(M)
Introduction of Two-Way WATSSaver® service and Two-Way Aggregated Plans	(M)
ISDN Individual Services - Residential and Business	(M)
Joint User Service	(M)
Late Payments	(M)
LightGate (a.k.a. BellSouth SPA Point to Point Network) Service	(M)
Line Out Service Feature	(M)
Local Exceptions	(M)
Local Operator Verification/Interrupt	(M)
MegaLink® Channel Service	(M)
MegaLink® ISDN Service	(M)(T)
MegaLink® Service	(M)
MegaLink® Plus Service	(M)
Message Waiting Indication - Audible (MWI)	(M)
Miscellaneous Listing	(M)
Multifeature Discount Plan	(M)
Multiline Hunt Queuing	(M)
MultiServ® Service	(M)
MultiServ® Plus Service	(M)
MultiServ® Multi-Account Service (MMAS)	(M)
NAR ESSX-1	(M)
Network Access Register Package	(M)

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## A36. PRICE REGULATION PLAN

### A36.1 Company Price Regulation Plan (Cont'd)

#### A36.1.4 List of Services by Category (Cont'd)

C. <i>Retail</i> Category (Cont'd)	(C)
Network Interface Equipment	(M)
Non-Competitive Service Connection Charges	(M)
Non-Published (Private) Listing	(M)
Non-Published (Semi-Private) Listing	(M)
Obsolete Telephone Answering Service	(M)
Operator Assisted Calls (Local Operator and Calling Card Services)	(M)
Operator Dialed Surcharge	(M)
Optional Calling Plans	(M)
Pole and Anchor Attachments	(M)
Premises Work Charges	(M)
Premises Work Charges - Complex Residence and Business	(M)
Prestige Communications Service (PCS)	(M)
Private Line Channels Payment Arrangements	(M)
Private Line Sampling Arrangements	(M)
PulseLink* Public Packet Switching (PPSN) Network Service	(M)
Remote Call Forwarding Service	(M)
Residential State Wide Rate Schedule (Flat, Measured, Message and ACS)	(M)
Returned Check Charge	(M)
RingMaster* Service	(M)
Route Diversity and Avoidance	(M)
Selective Class of Call Screening Service	(M)
Service Expediting Charge	(M)
Simplified Message Desk Interface (SMDI)	(M)
SMARTRing® service (a.k.a. BellSouth Dedicated Ring)	(M)
Special Number Acquisition Charge	(M)
Special Service Arrangements	(M)
Surrogate Client Number	(M)
SynchroNet* Service	(M)
Telecommunication Service Priority (TSP) System	(M)
Telephone Answering Service Facilities	(M)
Toll Restriction (Battery Reversal in C.O.)	(M)
Toll Trunks (Toll Terminals)	(M)
Touch-Tone Calling Service	(M)
TouchStar* Service	(M)
Trouble Determination Charge	(M)

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### A36. PRICE REGULATION PLAN

#### A36.1 Company Price Regulation Plan (Cont'd)

##### A36.1.4 List of Services by Category (Cont'd)

C. *Retail* Category (Cont'd)

Trunk Lines	(M)
Trunk Side Access Facility - Local Exchange Service	(M)
Two-Point Service (Long Distance Message Telecommunications Service)	
Uniform Access Number (UAN)	(M)
Voice Mail Companion Services Package	
VG/Sub VG/Wired Music Service/Commercial Quality Video (a.k.a. BellSouth SPA Commercial Quality Video)	
Volume Usage Measured Rate Service	(M)
Warm Line Service	
ZipCONNECT <sup>®</sup> Service	
Zone Charges - Business	(M)
Zone Charges - Residential	(M)

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## A36. PRICE REGULATION PLAN

### A36.1 Company Price Regulation Plan (Cont'd)

A36.1.5 Annual Filing Process *(Applicable to Basic Residential Rates beginning on May 1, 2002)*

A. (DELETED)

B. (DELETED)

(C)

(D)

(D)

### A36. PRICE REGULATION PLAN

#### A36.1 Company Price Regulation Plan (Cont'd)

##### A36.1.5 Annual Filing Process *(Applicable to Basic Residential Rates beginning on May 1, 2002)*

- C. Adjustments to Basic Residential Rates are limited to the amount of revenue calculated by the following formula:
1. **(DELETED)**
  2. **(DELETED)**
  3. Gross Domestic Product Price Index (GDP-PI) <sup>1</sup> \_\_\_\_\_  
of the most recent year *December – February time period*
  4. GDP-PI of the previous year *December – February time period* \_\_\_\_\_
  5. Change in GDP-PI ((L3 divided by L4)-1) \_\_\_\_\_
  6. *Allowed Rate Changes*
    - a. *Present Total Revenue (Basic Residential Service)* \_\_\_\_\_
    - b. *Line 5* \_\_\_\_\_
    - c. *(6a.)(6b.) = Allowed Total Revenue Adjustment – Current Year* \_\_\_\_\_
    - d. *Total increase or decrease allowed but not taken in previous years since 5/1/2002* \_\_\_\_\_
    - e. *Total allowed revenue adjustment – Current Year* \_\_\_\_\_
- D. **(DELETED)**

(C)  
(C)  
(D)  
(D)  
(C)  
(C)  
(C)  
(C)  
(C)  
(C)  
(C)  
(D)

Note 1: The source is the US Department of Commerce Bureau of Economic Analysis.

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## A36. PRICE REGULATION PLAN

### A36.1 Company Price Regulation Plan (Cont'd)

A36.1.5 Annual Filing Process *(Applicable to Basic Residential Rates beginning on May 1, 2002)*

E. (DELETED)

(C)

(D)

Attachment 2:

UNE Deaveraging

loop	zone 1	zone 2	zone 3	Non-recurring Charges	first	additional	25/75 weight
port	\$ 10.63	\$ 18.34	\$ 43.67	UNE Loop & NID	70.44	44.05	
usage	\$ 2.61	\$ 2.61	\$ 2.61	UNE Port	24.98	24.98	
non-recurring	\$ 5.46	\$ 5.46	\$ 5.46	Total non-recurring	95.42	69.03	75.6275
25% markup	\$ 2.10	\$ 2.10	\$ 2.10	3 year loc life/mo			\$ 2.10
Total	\$ -	\$ -	\$ -				
	\$ 20.80	\$ 28.51	\$ 53.84				

Approved UNE loop & NID rate	\$ 20.00	UNE loop rate	\$ 43.67
threshold density	2551	prorate %	53.17%
UNE ZONE 1	\$ 5,506,922	UNE loop rate	\$ 10.63
UNE ZONE 2	\$ 18,615,540	UNE loop rate	\$ 18.34
UNE ZONE 3	\$ 12,059,529	UNE loop rate	\$ 43.67
	\$ 36,181,991	UNE loop rate	\$ 43.67

CLLI	rg	density	cost/al	res	other	total	total
LSVLKYAP	5	10777.58	\$ 17.77	13,418	59,871	73289	\$ 1,302,542
LSVLKYBR	5	4176.49	\$ 21.27	38,370	26,508	64878	\$ 1,379,840
LSVLKYTS	5	4164.88	\$ 20.72	19,130	14,809	33939	\$ 703,295
LSVLKYSM	5	3782.53	\$ 21.05	26,851	20,315	47166	\$ 992,877
LSVLKY26	5	2971.80	\$ 22.15	24,817	12,777	37594	\$ 832,737
LSVLKYWE	5	2865.99	\$ 21.69	24,185	21,194	45379	\$ 984,478
LSVLKYSL	5	2801.13	\$ 21.31	15,071	13,054	28125	\$ 599,426
LSVLKYBE	5	2594.14	\$ 22.45	36,132	19,498	55630	\$ 1,249,150
LSVLKYAN	5	2544.04	\$ 23.38	15,390	14,858	30248	\$ 707,140
MYVLKYMA	1	2160.53	\$ 29.03	4,166	3,206	7372	\$ 214,002
LSVLKYOA	5	2123.95	\$ 22.90	31,124	19,528	50652	\$ 1,159,719
FRFTKYMA	3	2095.47	\$ 28.75	14,329	9,521	23850	\$ 685,614
LSVLKYSH	5	1764.70	\$ 23.37	17,641	9,081	26722	\$ 624,413
OWBOKYMA	3	1633.79	\$ 25.44	29,149	20,061	49210	\$ 1,251,934
PDCHKYMA	3	1616.47	\$ 24.74	15,813	15,415	31228	\$ 772,463
RCMDKYMA	3	1599.29	\$ 31.38	14,449	6,382	20831	\$ 653,699
FRFTKYES	3	1573.71	\$ 27.99	6,041	3,508	9549	\$ 267,279
LSVLKYVS	5	1401.01	\$ 25.64	23,023	7,601	30624	\$ 785,231
BWLGKYMA	3	1377.59	\$ 29.01	32,141	23,575	55716	\$ 1,616,197
MRRYKYMA	2	1358.51	\$ 33.75	9,641	4,592	14233	\$ 480,348
WNCHKYMA	2	1313.85	\$ 31.57	11,771	6,146	17917	\$ 565,700
LSVLKYJT	5	1172.69	\$ 25.26	8,244	7,211	15455	\$ 390,324
HPVLKYMA	3	1131.64	\$ 29.81	16,708	9,663	26371	\$ 786,130
SHVLKYMA	1	1105.89	\$ 31.08	6,710	4,691	11401	\$ 354,316

FLTNKYMA	1	1042.96	\$	46.76	4,201	1,195	5396	\$	252,338
CYNTKYMA	1	1024.05	\$	53.60	6,474	1,036	7510	\$	402,511
LSVLKYFC	5	1000.92	\$	26.30	12,630	3,347	15977	\$	420,154
GRTWKYMA	4.5	994.74	\$	31.40	8,708	7,794	16502	\$	518,089
MTSTKYMA	1	962.25	\$	39.74	7,923	3,629	11552	\$	459,023
PNVLKYMA	1	953.91	\$	36.98	5,053	1,824	6877	\$	254,314
CRBNKYMA	2	903.55	\$	36.50	11,944	3,313	15257	\$	556,919
HNSNKYMA	2	884.98	\$	30.72	15,596	9,490	25086	\$	770,626
MDBOKYMA	2	880.10	\$	32.09	5,329	2,403	7732	\$	248,098
PARSKYMA	1	840.85	\$	39.15	6,467	3,548	10015	\$	392,096
MDVIKYMA	2	837.58	\$	29.67	10,661	7,142	17803	\$	528,139
PRBGKYES	2	819.31	\$	41.40	4,676	2,234	6910	\$	286,047
PKVLKYMA	3	709.25	\$	37.71	8,344	4,989	13333	\$	502,744
OKGVKYES	4	681.22	\$	32.40	5,893	1,964	7857	\$	254,559
HRLNKYMA	1	678.91	\$	41.81	4,773	1,456	6229	\$	260,424
HDBGKYMA	1	621.82	\$	36.43	6,185	3,729	9914	\$	361,196
BRTWKYES	1	620.24	\$	36.40	9,429	5,543	14972	\$	544,921
WLBGKYMA	2	562.80	\$	54.89	5,939	1,927	7866	\$	431,774
MYFDKYMA	2	510.30	\$	29.72	6,898	4,164	11062	\$	328,796
LRBGKYMA	1	467.81	\$	42.43	6,632	2,064	8696	\$	368,992
LOUSKYES	1	451.97	\$	38.57	2,148	480	2628	\$	101,374
STFRKYMA	1	436.99	\$	52.41	4,207	944	5151	\$	269,945
PDCHKYLO	3	433.23	\$	33.82	7,881	2,483	10364	\$	350,525
SPFDKYMA	1	429.71	\$	52.68	2,177	870	3047	\$	160,522
DAVLKYMA	1	401.52	\$	29.45	7,986	5,953	13939	\$	410,511
GNVLKYMA	1	383.79	\$	45.15	5,620	1,481	7101	\$	320,630
LSVLKYCW	5	369.72	\$	31.12	7,765	3,486	11251	\$	350,165
BNTNKYMA	1	359.47	\$	44.79	5,351	1,267	6618	\$	296,424
CNCYKYMA	1	345.21	\$	38.21	3,425	852	4277	\$	163,433
HRFRKYMA	1	344.37	\$	52.47	2,383	700	3083	\$	161,754
WSPNKYMA	5	341.33	\$	41.93	1,375	244	1619	\$	67,883
CYDNKYMA	2	332.75	\$	72.40	1,475	179	1654	\$	119,743
ELCYKYES	2	304.72	\$	58.93	2,388	118	2506	\$	147,679
MGFDKYMA	1	300.25	\$	47.87	2,692	904	3596	\$	172,152
LSVLKYHA	5	271.41	\$	31.68	6,330	2,026	8356	\$	264,710
LBJTKYMA	1	264.22	\$	47.91	1,646	308	1954	\$	93,619
FKL NKYMA	1	256.16	\$	39.52	6,213	3,446	9659	\$	381,764
MARNKYMA	1	249.63	\$	58.65	3,422	699	4121	\$	241,677
PDCHKYRL	3	243.40	\$	40.11	5,135	830	5965	\$	239,272
JNCYKYMA	1	220.46	\$	47.43	1,586	187	1773	\$	84,098
PRTNKYES	1	200.37	\$	48.94	4,979	1,399	6378	\$	312,158

DWSPKYES	2	187.28	\$	45.88	2,872	686	3558	\$	163,248
CRTNKYMA	1	159.23	\$	40.84	2,898	1,063	3961	\$	161,767
NRVLKYMA	2	154.31	\$	47.79	1,690	365	2055	\$	98,207
PRVDKYMA	1	151.45	\$	40.97	2,017	405	2422	\$	99,239
CLPTKYMA	1	150.80	\$	56.96	745	59	804	\$	45,797
BVDMKYMA	1	147.38	\$	48.35	3,641	1,173	4814	\$	232,748
STRGKYMA	1	138.23	\$	54.70	2,542	399	2941	\$	160,864
SWSNKYMA	2	137.19	\$	50.54	2,284	368	2652	\$	134,040
JCSNKYMA	1	128.35	\$	68.07	4,034	767	4801	\$	326,822
LGRNKYES	5	123.35	\$	35.46	5,848	2,101	7949	\$	281,894
WHBGKYMA	1	108.20	\$	55.24	5,407	1,393	6800	\$	375,640
MIRGPKYMA	2	94.36	\$	55.14	465	6	471	\$	25,970
ERTNKYMA	2	89.63	\$	34.56	873	102	975	\$	33,700
MARTKYMA	2	87.18	\$	50.60	1,452	-	1452	\$	73,466
SNTNKYMA	1	86.47	\$	51.52	3,550	1,257	4807	\$	247,652
SSVLKYMA	1	85.39	\$	48.51	1,456	291	1747	\$	84,742
ENSRKYMA	3	83.46	\$	53.96	1,800	206	2006	\$	108,239
DRBOKYES	1	76.93	\$	60.32	1,557	-	1557	\$	93,918
NEONKYES	1	72.96	\$	60.82	1,010	-	1010	\$	61,425
ALLNKYMA	2	67.71	\$	53.17	1,970	50	2020	\$	107,395
CRLSKYMA	1	64.54	\$	67.16	2,655	574	3229	\$	216,854
EMNINKYES	1	63.63	\$	56.64	3,187	595	3782	\$	214,226
STONKYMA	1	59.50	\$	51.88	2,568	147	2715	\$	140,842
RLVLKYMA	1	58.86	\$	39.90	5,872	3,231	9103	\$	363,172
RSTRKYES	3	58.84	\$	34.30	4,223	62	4285	\$	146,981
LVMRKYMA	1	57.45	\$	54.18	997	95	1092	\$	59,159
PDCHKYIP	3	52.49	\$	60.19	546	96	642	\$	38,641
WRFDKYMA	1	50.84	\$	68.75	1,530	-	1530	\$	105,185
TYVLKYMA	1	48.38	\$	68.12	2,374	189	2563	\$	174,589
CMBGKYMA	1	47.92	\$	63.37	882	94	976	\$	61,846
VIRGKYMA	2	47.71	\$	54.95	3,378	160	3538	\$	194,424
GTHRKYMA	1	47.50	\$	61.57	877	261	1138	\$	70,062
GBVLKYMA	1	46.34	\$	46.16	1,593	25	1618	\$	74,692
BYVLKYMA	1	45.25	\$	71.96	2,219	586	2805	\$	201,850
HABTKYMA	3	42.94	\$	55.28	1,334	299	1633	\$	90,280
WLCKKYES	1	40.85	\$	55.63	1,744	111	1855	\$	103,198
EDVLKYMA	1	40.19	\$	54.50	2,983	328	3311	\$	180,456
FEBRKYMA	1	39.77	\$	61.20	2,450	278	2728	\$	166,944
MGTWKYMA	1	39.21	\$	61.98	3,635	1,472	5107	\$	316,534
SEBRKYMA	1	38.74	\$	55.31	806	42	848	\$	46,900
MCWLKYMA	2	36.67	\$	63.55	1,220	-	1220	\$	77,529

WYLDKYES	2	36.65	\$	62.19	1,552	-	1552	\$	96,521
PVLKYMA	1	36.60	\$	57.90	5,290	480	5770	\$	334,065
FORDKYMA	3	36.37	\$	86.27	468	98	566	\$	48,829
MACEKYMA	3	35.58	\$	59.70	1,129	76	1205	\$	71,933
BRMINKYMA	1	34.99	\$	65.63	1,144	-	1144	\$	75,081
STGRKYMA	4.5	34.84	\$	63.60	1,160	288	1448	\$	92,098
CADZKYMA	1	33.79	\$	56.43	3,650	858	4508	\$	254,364
HANSKYMA	2	33.71	\$	62.88	979	114	1093	\$	68,729
HRBGKYES	1	32.90	\$	70.05	2,248	10	2258	\$	158,169
BNLYKYMA	1	31.27	\$	86.36	336	8	344	\$	29,708
EMNNKYPL	1	31.26	\$	79.02	755	-	755	\$	59,662
BRGNKYMA	1	28.83	\$	52.40	1,009	114	1123	\$	58,847
NWHNKYMA	1	28.42	\$	59.44	1,784	213	1997	\$	118,692
FNVLYKYMA	1	28.24	\$	87.80	630	32	662	\$	58,124
FDCKKYES	2	27.55	\$	63.76	2,845	291	3136	\$	199,950
WHVLYKYMA	3	26.41	\$	65.46	1,509	165	1674	\$	109,581
PRVLYKYMA	1	26.25	\$	69.70	1,083	234	1317	\$	91,791
HWVLYKYMA	1	23.97	\$	73.50	1,699	3	1702	\$	125,099
CLTNKYES	1	22.26	\$	65.68	1,588	449	2037	\$	133,797
PLRGKYMA	3	21.82	\$	65.50	962	90	1052	\$	68,909
SCRMKYMA	1	21.75	\$	66.10	691	125	816	\$	53,939
SLPHKYMA	1	20.98	\$	58.02	706	245	951	\$	55,180
BLFDKYMA	1	20.70	\$	70.17	1,080	85	1165	\$	81,743
CLHNKYMA	1	20.11	\$	72.18	1,512	360	1872	\$	135,124
MILTNYKYMA	1	19.51	\$	66.61	914	-	914	\$	60,879
PKVLKYMT	3	19.49	\$	69.50	1,147	169	1316	\$	91,464
INEZKYMA	1	18.77	\$	65.51	2,372	3	2375	\$	155,582
PMBRKYMA	3	18.31	\$	87.18	729	71	800	\$	69,744
WLVLYKYMA	3	17.85	\$	79.73	624	89	713	\$	56,850
SRGHKYMA	3	17.82	\$	81.70	469	17	486	\$	39,704
BWLGKYRV	3	17.10	\$	83.67	1,087	88	1175	\$	98,311
MLBGKYMA	1	17.06	\$	74.74	631	40	671	\$	50,150
EKTNYKYMA	1	17.04	\$	58.79	2,148	807	2955	\$	173,720
ISLDKYMA	1	16.89	\$	54.93	427	103	530	\$	29,113
HBVLYKYMA	2	16.78	\$	87.48	577	180	757	\$	66,225
CLAYKYMA	1	16.69	\$	62.25	1,065	31	1096	\$	68,228
WACOKYMA	3	16.62	\$	68.45	1,248	152	1400	\$	95,835
PNTHKYMA	3	16.40	\$	69.27	509	92	601	\$	41,634
RBRDKYMA	2	16.23	\$	87.09	671	59	730	\$	63,573
SDVLYKYMA	4.5	16.14	\$	102.58	846	97	943	\$	96,735
COTNKYMA	3	16.09	\$	77.00	1,014	198	1212	\$	93,325

UTICKYMA	3	15.74	\$	80.30	897	52	949	\$	76,206
CRBOKYMA	1	15.40	\$	68.97	1,421	111	1532	\$	105,663
BDFRKYMA	1	15.31	\$	72.93	1,358	3	1361	\$	99,264
OWTNKYMA	1	15.28	\$	76.14	2,823	503	3326	\$	253,243
SLVSKYMA	1	15.04	\$	77.51	870	88	958	\$	74,252
WDDYKYMA	1	14.63	\$	92.11	759	8	767	\$	70,646
STNLKYMA	3	14.49	\$	74.02	594	116	710	\$	52,554
CHPLKYMA	1	14.32	\$	89.75	534	39	573	\$	51,424
GHNTKYMA	1	12.91	\$	96.19	522	5	527	\$	50,691
DIXNKYMA	1	12.71	\$	80.63	1,110	118	1228	\$	99,016
AURRKYMA	1	12.69	\$	119.10	307	-	307	\$	36,564
KKVLKYMA	3	12.55	\$	115.92	365	38	403	\$	46,718
WNCHKYPV	2	12.39	\$	106.03	351	26	377	\$	39,972
HCMNKYMA	1	12.17	\$	64.28	1,542	452	1994	\$	128,166
FRDNKYMA	1	11.32	\$	91.27	426	3	429	\$	39,154
BGDDKYMA	1	11.31	\$	98.65	501	-	501	\$	49,424
WSBGKYMA	1	10.92	\$	120.25	655	8	663	\$	79,726
MCDNKYMA	1	10.64	\$	100.08	1,113	7	1120	\$	112,088
MTEDKYMA	1	10.56	\$	106.13	607	9	616	\$	65,377
NEBOKYMA	2	9.99	\$	89.44	844	34	878	\$	78,525
PTRYKYMA	1	9.83	\$	109.91	416	-	416	\$	45,722
BLSPKYMA	3	9.39	\$	111.79	618	94	712	\$	79,595
STCHKYMA	2	9.15	\$	75.69	318	28	346	\$	26,190
CNTWKYMA	1	9.10	\$	75.80	463	50	513	\$	38,883
SLGHKYMA	1	9.05	\$	107.07	712	3	715	\$	76,552
SHGVKYMA	1	8.75	\$	100.77	653	54	707	\$	71,247
GRACKYMA	3	8.58	\$	101.70	659	137	796	\$	80,957
FDVLKYMA	1	8.04	\$	102.03	1,016	8	1024	\$	104,483
TRENNKYMA	1	7.21	\$	90.97	379	73	452	\$	41,119
CNTNKYMA	1	6.03	\$	68.82	842	186	1028	\$	70,749
LFYTKYMA	3	5.39	\$	147.60	182	19	201	\$	29,667

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Attachment 3:

Service Quality Measurements

BellSouth  
Service Quality Measurements  
Regional Performance Reports

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\* These reports are subject to change due to regulatory requirements or to correct errors and etc.

**PRE-ORDERING - OSS**

<b>Report/Measurement :</b>	
Average OSS Response Time and Response Interval	
<b>Definition:</b>	
Average response time and response intervals are the average times and number of requests responded to within certain intervals for accessing legacy data associated with appointment scheduling, service & feature availability, address verification, request for Telephone Numbers (TNs), and Customer Service Records (CSRs).	
<b>Exclusions:</b>	
None	
<b>Business Rules:</b>	
The average response time for retrieving pre-order/order information from a given legacy system is determined by summing the response times for all requests submitted to the legacy during the reporting period and dividing by the total number of legacy requests for that day X 100. The response interval starts when the client application (LENS or TAG for CLECs and RNS for BST) submits a request to the legacy system and ends when the appropriate response is returned to the client application. The number of legacy accesses during the reporting period, which take less than 2.3 seconds and the number, which take more than 6 seconds are also captured.	
<b>Level of Disaggregation:</b>	
<ul style="list-style-type: none"> <li>• RSAG – Address (Regional Street Address Guide- Address) - stores street address information used to validate customer addresses</li> <li>• RSAG – TN (Regional Street Address Guide- Telephone Number) – contains information about facilities available and telephone numbers working at a given address.</li> <li>• ATLAS (Application for Telephone Number Load Administration and Selection) - acts as a warehouse for storing telephone numbers that are available for assignment by the system. It enables CLECs and BST service reps to select and reserve telephone numbers.</li> <li>• COFFI (Central Office Feature File Interface) – stores information about product and service offerings and availability.</li> <li>• DSAP (DOE Support Application) – provides due date information.</li> <li>• HAL (Hands-Off Assignment Logic) – a system used to access the Business Office Customer Record Information System (BOCRIS). It allows BST servers, including LENS, access to legacy systems.</li> <li>• P/SIMS (Product/Services Inventory Management System) – provides information on capacity, tariffs, inventory and service availability.</li> <li>• OASIS (Obtain Available Services Information Systems ) - Information on feature and rate availability.</li> </ul>	
<b>Calculation:</b>	
$\frac{\sum[(\text{Date \& Time of Legacy Response}) - (\text{Date \& Time of Request to Legacy})]}{(\text{Number of Legacy Requests During the Reporting Period})} \times 100$	
<b>Report Structure:</b>	
<ul style="list-style-type: none"> <li>• Not CLEC Specific</li> <li>• Not product/service specific</li> <li>• Regional Level</li> </ul>	
<b>Data Retained Relating to CLEC Experience:</b>	<b>Data Retained Relating to BST Performance:</b>
<ul style="list-style-type: none"> <li>• Report Month</li> <li>• Legacy Contract (per reporting dimension)</li> <li>• Response Interval</li> <li>• Regional Scope</li> </ul>	<ul style="list-style-type: none"> <li>• Report Month</li> <li>• Legacy Contract (per reporting dimension)</li> <li>• Response Interval</li> <li>• Regional Scope</li> </ul>
<b>Retail Analog/Benchmark</b>	
CLEC Average Response Interval is comparable to BST Average Response Interval	

Revision date: 09/14/99 (lg)

BellSouth  
Service Quality Measurements  
Regional Performance Reports

**LEGACY SYSTEM ACCESS TIMES FOR RNS**

System	Contract	Data	< 2.3 sec	> 6 sec	Avg. Sec	# of Calls
RSAG	RSAG-TN	Address	x	x	x	x
RSAG	RSAG-ADDR	Address	x	x	x	x
ATLAS	ATLAS-TN	TN	x	x	x	x
DSAP	DSAP-DDI	Schedule	x	x	x	x
CRIS	CRSACCTS	CSR	x	x	x	x
OASIS	OASISBSN	Feature/Service	x	x	x	x
OASIS	OASISCAR	Feature/Service	x	x	x	x
OASIS	OASISLPC	Feature/Service	x	x	x	x
OASIS	OASISMTN	Feature/Service	x	x	x	x
OASIS	OASISBIG	Feature/Service	x	x	x	x

**LEGACY SYSTEM ACCESS TIMES FOR LENS**

System	Contract	Data	< 2.3 sec	> 6 sec	Avg. Sec	# of Calls
RSAG	RSAG-TN	Address	x	x	x	x
RSAG	RSAG-ADDR	Address	x	x	x	x
ATLAS	ATLAS-TN	TN	x	x	x	x
DSAP	DSAPDDI	Schedule	x	x	x	x
HAL	HAL/CRIS	CSR	x	x	x	x
COFFI	COFFI/USOC	Feature/Service	x	x	x	x
P/SIMS	PSIMS/ORB	Feature/Service	x	x	x	x

**LEGACY SYSTEM ACCESS TIMES FOR TAG**

System	Contract	Data	< 2.3 sec	> 6 sec	Avg. Sec	# of Calls
RSAG	RSAG-TN	Address	x	x	x	x
RSAG	RSAG-ADDR	Address	x	x	x	x
ATLAS	ATLASTN	TN	x	x	x	x
DSAP	DSAPDDI	Schedule	x	x	x	x
HAL	HAL/CRIS	CSR	x	x	x	x
CRIS	CRSEINIT	CSR	x	x	x	x
CRIS	CRSECSR	CSR	x	x	x	x

Revision date: 08/10/99 (lg)

BellSouth  
Service Quality Measurements  
Regional Performance Reports

**PRE-ORDERING - OSS**

<b>Report/Measurement:</b>	
OSS Interface Availability	
<b>Definition:</b>	
Percent of time OSS interface is functionally available compared to scheduled availability. Availability percentages for CLEC interface systems and for all Legacy systems accessed by them are captured	
<b>Exclusions:</b>	
None	
<b>Business Rules:</b>	
This measurement captures the availability percentages for the BST systems, which are used by CLECs during Pre-Ordering functions. Comparison to BST results allow conclusions as to whether an equal opportunity exists for the CLEC to deliver a comparable customer experience.	
<b>Level of Disaggregation:</b>	
<ul style="list-style-type: none"> <li>• Regional Level</li> </ul>	
<b>Calculation:</b>	
$(\text{Functional Availability}) / (\text{Scheduled Availability}) \times 100$	
<b>Report Structure:</b>	
<ul style="list-style-type: none"> <li>• Not CLEC Specific</li> <li>• Not product/service specific</li> <li>• Regional Level</li> </ul>	
<b>Data Retained Relating to CLEC Experience</b>	<b>Data Retained Relating to BST Experience</b>
<ul style="list-style-type: none"> <li>• Report Month</li> <li>• Legacy contract type (per reporting dimension)</li> <li>• Regional Scope</li> </ul>	<ul style="list-style-type: none"> <li>• Report Month</li> <li>• Legacy contract type (per reporting dimension)</li> <li>• Regional Scope</li> </ul>
<b>Retail Analog/Benchmark:</b>	
CLEC OSS Interface Availability is comparable to BST OSS Interface Availability	

Revision date: 09/14/99 (lg)

**OSS Interface Availability**

OSS Interface	% Availability
LENS	X
LEO Mainframe	X
LEO UNIX	X
LESOG	X
EDI	X
HAL	X
BOCRIS	X
ATLAS/COFFI	X
RSAG/DSAP	X
SOCS	X
TAG	X

## ORDERING

<b>Report/Measurement:</b>
Percent Flow Through Service Requests (Summary)
<b>Definition:</b>
The percentage of Local Service Requests (LSR) submitted electronically via the CLEC mechanized ordering process that flow through to SOCS without manual intervention
<b>Exclusions:</b>
<ul style="list-style-type: none"><li>• Fatal Rejects</li><li>• Auto Clarification</li><li>• Manual Fallout</li><li>• CLEC System Fallout</li><li>• Supplements (subsequent versions) to cancel LSRs that are not LESOG eligible (Under development)</li></ul>
<b>Business Rules:</b>
<p>The CLEC mechanized ordering process includes all LSRs, including supplements (subsequent versions) which are submitted through one of the three gateway interfaces (TAG, EDI, and LENS), and flow through to SOCS without manual intervention. These LSRs can be divided into two classes of service; Business and Residence, and three types of service; Resale, Unbundled Network Elements (UNE), and specials. The CLEC mechanized ordering process does not include LSRs, which are, submitted manually (e.g., fax, and courier), or are not designed to flow through, i.e., Manual Fallout.</p> <p><b>Definitions:</b></p> <p><b>Fatal Rejects:</b> Errors that prevent an LSR, submitted by the CLEC, from being processed further. When an LSR is submitted by a CLEC, LEO will perform edit checks to ensure the data received is correctly formatted and complete. For example, if the PON field contains an invalid character, LEO will reject the LSR and the CLEC will receive a Fatal Reject.</p> <p><b>Auto-Clarification:</b> errors that occur due to invalid data within the LSR. LESOG will perform data validity checks to ensure the data within the LSR is correct and valid. For example, if the address on the LSR is not valid according to RSAG, the CLEC will receive an Auto-Clarification.</p> <p><b>Manual Fallout:</b> errors that occur by design. Certain LSRs are designed to fallout of the Mechanized Order Process due to their complexity. These LSRs are manually processed by the LCSC. When a CLEC submits an LSR, LESOG will determine if the LSR should be forwarded to LCSC for manual handling. Following are the categories for Manual Fallout.</p> <ol style="list-style-type: none"><li>1. Complex services*</li><li>2. Expedites (requested by the CLEC)</li><li>3. Special pricing plans</li><li>4. Denials-restore and conversion, or disconnect and conversion orders</li><li>5. Partial migrations</li><li>6. Class of service invalid in certain states with some types of service</li><li>7. New telephone number not yet posted to BOCRIS</li><li>8. Low volume such as activity type "T" (move)</li><li>9. Pending order review required</li><li>10. More than 25 business lines</li><li>11. Restore or suspend for UNE combos</li><li>12. Transfer of calls option for the CLEC's end users</li><li>13. CSR inaccuracies such as invalid or missing CSR data in CRIS</li></ol> <p>* Attached is a list of services, including complex services, and whether LSRs issued for the services are eligible to flow through.</p> <p><b>Total System Fallout:</b> Errors that require manual review by the LCSC to determine if the error is caused by the CLEC, or is due to system functionality. If it is determined the error is caused by the CLEC, the LSR will be sent back to the CLEC as clarification. If it is determined the error is BST caused, the LCSC representative will correct the error.</p>

**ORDERING – (Percent Flow Through Service Requests (Summary) – Continued)**

<b>Calculation:</b>	
Percent Flow Through Service Requests = $\Sigma[(\text{Total number of valid service requests that flow-through to SOCS}) / (\text{Total number of valid service requests delivered to SOCS}) \times 100$	
<b>Description:</b>	
Percent Flow Through = $(\text{The total number of LSRs that flow through LESOG to SOCS}) / (\text{the number of LSRs passed from LEO to LESOG}) - \Sigma[(\text{the number of LSRs that fall out for manual processing}) + (\text{the number of LSRs that are returned to the CLEC for clarification}) + (\text{the number of LSRs that contain errors made by CLECs})] \times 100.$	
<b>Report Structure:</b>	
<ul style="list-style-type: none"> <li>• CLEC Aggregate               <ul style="list-style-type: none"> <li>➢ Region</li> </ul> </li> </ul>	
<b>Level of Disaggregation:</b>	
<ul style="list-style-type: none"> <li>• Geography               <ul style="list-style-type: none"> <li>➢ Region</li> </ul> </li> <li>• Product (Under Development)               <ul style="list-style-type: none"> <li>➢ Residence</li> <li>➢ Business</li> <li>➢ UNE</li> <li>➢ Special</li> </ul> </li> </ul>	
<b>Data Retained Relating to CLEC Experience</b>	<b>Data Retained Relating to BST Experience</b>
<ul style="list-style-type: none"> <li>• Report month</li> <li>• Total number of LSRs received, by interface, by CLEC:               <ul style="list-style-type: none"> <li>➢ TAG</li> <li>➢ EDI</li> <li>➢ LENS</li> </ul> </li> <li>• Total number of errors by type, by CLEC:               <ul style="list-style-type: none"> <li>➢ Fatal rejects</li> <li>➢ Total fallout for manual processing</li> <li>➢ Auto clarification</li> <li>➢ CLEC caused system fallout</li> </ul> </li> <li>• Total number of errors by error code</li> </ul>	<ul style="list-style-type: none"> <li>• Report month</li> <li>• Total number of errors by type:               <ul style="list-style-type: none"> <li>➢ BST system error</li> </ul> </li> </ul>
<b>Retail Analog/Benchmark:</b>	
CLEC Flow Through/benchmark comparison (Under Development)	

Revision Date: 09/03/99 (tm)

## ORDERING

<b>Report/Measurement:</b>
Percent Flow Through Service Requests (Detail)
<b>Definition:</b>
A detailed list by CLEC of the percentage of Local Service Requests (LSR) submitted electronically via the CLEC mechanized ordering process that flow through to SOCS without manual or human intervention.
<b>Exclusions:</b>
<ul style="list-style-type: none"><li>• Fatal Rejects</li><li>• Auto Clarification</li><li>• Manual Fallout</li><li>• CLEC System Fallout</li><li>• Supplements (subsequent versions) to cancel LSRs that are not LESOG eligible(Under development)</li></ul>
<b>Business Rules:</b>
The CLEC mechanized ordering process includes all LSRs, including supplements (subsequent versions) which are submitted through one of the three gateway interfaces (TAG, EDI, and LENS), and flow through to SOCS without manual intervention. These LSRs can be divided into two classes of service; Business and Residence, and three types of service; Resale, Unbundled Network Elements (UNE) and specials. The CLEC mechanized ordering process does not include LSRs, which are, submitted manually (e.g., fax, and courier), or are not designed to flow through, i.e., Manual Fallout.
<b>Definitions:</b>
<b>Fatal Rejects:</b> Errors that prevent an LSR, submitted by the CLEC, from being processed further. When an LSR is submitted by a CLEC, LEO will perform edit checks to ensure the data received is correctly formatted and complete. For example, if the PON field contains an invalid character, LEO will reject the LSR and the CLEC will receive a Fatal Reject.
<b>Auto-Clarification:</b> errors that occur due to invalid data within the LSR. LESOG will perform data validity checks to ensure the data within the LSR is correct and valid. For example, if the address on the LSR is not valid according to RSAG, the CLEC will receive an Auto-Clarification.
<b>Manual Fallout:</b> errors that occur by design. Certain LSRs are designed to fallout of the Mechanized Order Process due to their complexity. These LSRs are manually processed by the LCSC. When a CLEC submits an LSR, LESOG will determine if the LSR should be forwarded to LCSC for manual handling. Following are the categories for Manual Fallout:
<ol style="list-style-type: none"><li>1. Complex services*</li><li>2. Expedites (requested by the CLEC)</li><li>3. Special pricing plans</li><li>4. Denials-restore and conversion, or disconnect and conversion orders</li><li>5. Partial migrations</li><li>6. Class of service invalid in certain states with some types of service</li><li>7. New telephone number not yet posted to BOCRIS</li><li>8. Low volume such as activity type "T" (move)</li><li>9. Pending order review required</li><li>10. More than 25 business lines</li><li>11. Restore or suspend for UNE combos</li><li>12. Transfer of calls option for the CLEC's end users</li><li>13. CSR inaccuracies such as invalid or missing CSR data in CRIS</li></ol>
*Attached is a list of services, including complex services, and whether LSRs issued for the services are eligible to flow through.
<b>Total System Fallout:</b> Errors that require manual review by the LCSC to determine if the error is caused by the CLEC, or is due to system functionality. If it is determined the error is caused by the CLEC, the LSR will be sent back to the CLEC as clarification. If it is determined the error is BST caused, the LCSC representative will correct the error.

**ORDERING -- (Percent Flow Through Service Requests (Detail) -- Continued)**

<b>Calculation:</b>	
Percent Flow Through Service Requests = (Total number of valid service requests that flow-through to SOCS) / (Total number of valid service requests delivered to SOCS) X 100	
<b>Description:</b>	
Percent Flow Through = The total number of LSRs that flow through LESOG to SOCS / (the number of LSRs passed from LEO to LESOG) - Σ[(the number of LSRs that fall out for manual processing + the number of LSRs that are returned to the CLEC for clarification + the number of LSRs that contain errors made by CLECs)] X 100.	
<b>Report Structure:</b>	
<ul style="list-style-type: none"> <li>• Provides the flow through percentage for each CLEC (by alias designation) submitting LSRs through the CLEC mechanized ordering process. The report provides the following:           <ul style="list-style-type: none"> <li>➢ CLEC (by alias designation)</li> <li>➢ Number of fatal rejects</li> <li>➢ Mechanized interface used</li> <li>➢ Total mechanized LSRs</li> <li>➢ Total manual fallout</li> <li>➢ Number of auto clarifications returned to CLEC</li> <li>➢ Number of validated LSRs</li> <li>➢ Number of BST caused fallout</li> <li>➢ Number of CLEC caused fallout</li> <li>➢ Number of Service Orders Issued</li> <li>➢ Base calculation</li> <li>➢ CLEC error excluded calculation</li> </ul> </li> </ul>	
<b>Level of Disaggregation:</b>	
<ul style="list-style-type: none"> <li>• CLEC Specific (by alias designation to protect CLEC specific proprietary data)</li> <li>• Geographic:           <ul style="list-style-type: none"> <li>➢ Region</li> </ul> </li> <li>• Product (Under development)           <ul style="list-style-type: none"> <li>➢ Residence</li> <li>➢ Business</li> <li>➢ UNE</li> <li>➢ Special</li> </ul> </li> </ul>	
<b>Data Retained Relating to CLEC Experience</b>	<b>Data Retained Relating to BST Experience</b>
<ul style="list-style-type: none"> <li>• Report month</li> <li>• Total number of LSRs received, by interface, by CLEC           <ul style="list-style-type: none"> <li>➢ TAG</li> <li>➢ EDI</li> <li>➢ LENS</li> </ul> </li> <li>• Total number of errors by type, by CLEC           <ul style="list-style-type: none"> <li>➢ Fatal rejects</li> <li>➢ Total fallout for manual processing</li> <li>➢ Auto clarification</li> <li>➢ CLEC errors</li> </ul> </li> <li>• Total number of errors by error code</li> </ul>	<ul style="list-style-type: none"> <li>• Report month</li> <li>• Total number of errors by type:           <ul style="list-style-type: none"> <li>➢ BST system error</li> </ul> </li> </ul>
<b>Retail Analog/Benchmark:</b>	
CLEC Flow Through/benchmark comparison (Under development)	

Revision Date: 09/03/99 (tm)

**ORDERING**

<b>Report/Measurement:</b>	
Flow Through Error Analysis	
<b>Definition:</b>	
An analysis of each error type (by error code) that was experienced by the LSRs that did not flow through to SOCS.	
<b>Exclusions:</b>	
Each Error Analysis is error code specific; therefore exclusions are not applicable.	
<b>Business Rules:</b>	
The CLEC mechanized ordering process includes all LSRs, including supplements (subsequent versions) which are submitted through one of the three gateway interfaces (TAG, EDI, and LENS), and flow through to provisioning SOCS without manual intervention. These LSRs can be divided into two classes of service; Business and Residence, and two types of service; Resale and Unbundled Network Elements (UNE). This measurement captures the total number of errors by type. The CLEC mechanized ordering process does not include LSRs, which are, submitted manually (e.g., fax, and courier).	
<b>Calculation:</b>	
Σ Of errors by type.	
<b>Report Structure:</b>	
<ul style="list-style-type: none"> <li>• Provides an analysis of each error type (by error code). The report is in descending order by count of each error code and provides the following: <ul style="list-style-type: none"> <li>➤ Error Type (by error code)</li> <li>➤ Count of each error type</li> <li>➤ Percent of each error type</li> <li>➤ Cumulative percent</li> <li>➤ Error Description</li> <li>➤ CLEC Caused Count of each error code</li> <li>➤ Percent of aggregate by CLEC caused count</li> <li>➤ Percent of CLEC by CLEC caused count</li> <li>➤ BST Caused Count of each error code</li> <li>➤ Percent of aggregate by BST caused count</li> <li>➤ Percent of BST by BST caused count</li> </ul> </li> </ul>	
<b>Level of Disaggregation:</b>	
Region	
<b>Data Retained Relating to CLEC Experience</b>	<b>Data Retained Relating to BST Experience</b>
<ul style="list-style-type: none"> <li>• Report month</li> <li>• Total number of LSRs received</li> <li>• Total number of errors by type ( by error code) <ul style="list-style-type: none"> <li>➤ CLEC caused error</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Report month</li> <li>• Total number of errors by type (by error code) <ul style="list-style-type: none"> <li>➤ BST system error</li> </ul> </li> </ul>
<b>Retail Analog/Benchmark:</b>	
Not Applicable	

Revision Date: 09/03/99 (tm)

BellSouth  
Service Quality Measurements  
Regional Performance Reports

**Attachment**  
**BellSouth Flow-through Analysis**  
**For CLECs LSRs placed via EDI or TAG**

	BellSouth Service Offered to CLEC via resale or UNE	Flow-through if no BST or CLEC Errors (Yes/No)	Complex Service (Yes/No)	Complex Order (Yes/No)	Design Service (Yes/No)	Can ordering this service cause fall out for a reason other than errors or complex? If so, what reason?
1	Flat Rate/Residence	Yes	No	No	no	
2	Flat Rate/Business	Yes	No	No	no	
3	Pay Phone Provider	No	No	No	no	
4	Measured Rate/Res.	Yes	No	No	no	
5	Measured Rate/Bus.	Yes	No	No	no	
6	Area Plus	Yes	No	No	no	
7	Package/Complete Choice and area plus	Yes	No	No	no	
8	Optional Calling Plan	Yes	No	No	no	
9	Ga. Community Calling	Yes	No	No	no	
10	Call Waiting Deluxe	Yes	No	No	no	
11	Call Waiting	Yes	No	No	no	
12	Caller ID	Yes	No	No	no	
13	Speed Calling	Yes	No	No	no	
14	3 Way Calling	Yes	No	No	no	
15	Call Forwarding-Variable	Yes	No	No	no	
16	Remote Access to CF	Yes	No	No	no	
17	Enhanced Caller ID	Yes	No	No	no	
18	Memory Call	Yes	No	No	no	
19	Memory Call Ans. Svc.	Yes	No	No	no	
20	MTS	Yes	No	No	no	
21	RCF	Yes	No	No	no	
22	Ringmaster	Yes	No	No	no	
23	Call Tracing	Yes	No	No	no	
24	Call Block	Yes	No	No	no	
25	Repeat Dialing	Yes	No	No	no	
26	Call Selector	Yes	No	No	no	
27	Call Return	Yes	No	No	no	
28	Preferred Call Forward	Yes	No	No	no	
29	Touchtone	Yes	No	No	no	
30	Visual Director	Yes	No	No	no	
31	INP (all types?)	Yes	UNE	No	no	
32	Unbundled Loop-Analog 2W, SL1, SL2	Yes	UNE	No	Yes-designed, no-non-designed	
33	2 wire analog port	Yes	UNE	No	no	
34	Local Number Portability (always?)	Yes	UNE	No	no	
35	Accupulse	No	Yes	Yes	yes	See note at bottom of matrix.
36	Basic Rate ISDN	No	Yes	Yes	yes	LSR electronically submitted; no flow through

BellSouth  
Service Quality Measurements  
Regional Performance Reports

	BellSouth Service Offered to CLEC via resale or UNE	Flow-through if no BST or CLEC Errors (Yes/No)	Complex Service (Yes/No)	Complex Order (Yes/No)	Design Service (Yes/No)	Can ordering this service cause fall out for a reason other than errors or complex? If so, what reason?
37	DID	No*	Yes	Yes	Yes	* yes with OSS'99
38	Frame Relay	No	Yes	Yes	yes	
39	Megalink	No	Yes	Yes	yes	
40	Megalink-T1	No	Yes	Yes	yes	
41	Native Mode LAN Interconnection (NMLI)	No	Yes	Yes	yes	
42	Pathlink Primary Rate ISDN	No	Yes	Yes	yes	
43	Synchronet	No	Yes	Yes	yes	LSR electronically submitted; no flow through
44	PBX Trunks	No	Yes	Yes	Yes	LSR electronically submitted; no flow through
45	LightGate	No	Yes	Yes	yes	
46	Smartpath	No	Yes	Yes	yes	
47	Hunting	No	Yes	no	no	LSR electronically submitted; no flow through
48	CENTREX	No	Yes	Yes	no	
49	FLEXSERV	No	Yes	Yes	yes	
50	Multiserv	No	Yes	Yes	yes	
51	Off-Prem Stations	No	Yes	Yes	yes	
52	SmartRING	No	Yes	Yes	yes	
53	FX	No	Yes	Yes	yes	
54	Tie Lines	No	Yes	Yes	Yes	
55	WATS	No	Yes	Yes	yes	
56	4 wire analog voice grade loop	No	UNE	Yes	yes-designed, no-non-designed	
57	4 wire DS1 & PRI digital loop	No	UNE	Yes	yes	
58	2 wire ISDN digital loop	No	UNE	Yes	yes	
59	4 wire DS1 & PRI digital loop	No	UNE	Yes	yes	
60	ADSL	No*	UNE	Yes	yes	* yes as of OSS'99?
61	HDSL	No	UNE	Yes	yes	
62	2 wire analog DID trunk port	No	UNE	Yes	Yes	
63	2 wire ISDN digital line side port	No	UNE	Yes	yes	
64	4 wire ISDN DSI digital trunk ports	No	UNE	Yes	yes	
65	UNE Combinations	y-loop+port	UNE	Yes	yes	
66	Directory Listings (simple)	No*	UNE	Yes	no	* yes as of OSS'99

BellSouth  
Service Quality Measurements  
Regional Performance Reports

	BellSouth Service Offered to CLEC via resale or UNE	Flow-through if no BST or CLEC Errors (Yes/No)	Complex Service (Yes/No)	Complex Order (Yes/No)	Design Service (Yes/No)	Can ordering this service cause fall out for a reason other than errors or complex? If so, what reason?
67	Directory Listings (complex)	No*	UNE	yes	no	* yes as of OSS'99, captions and indentions
68	ESSX	No	Yes	Yes	no	

Note for last column: For all services that indicate 'No' for flow-through, the following reasons, in addition to errors or complex services, also prompt manual handling: Expedites from CLECs, special pricing plans, for denials – restore and conversion or disconnect and conversion both required, partial migrations (although conversions-as-is flow through), class of service invalid in certain states with some TOS – e.g. gov't, or cannot be changed when changing main TN on C activity, low volume – e.g. activity type T=move, pending order review required, more than 25 business lines, restore or suspend for UNE combos, transfer of calls option for CLEC end user – fixed with release 6.0, new TN not yet posted to BOCRIS. All but the last one are unique to the CLEC environment.

**ORDERING**

<b>Report/Measurement:</b>	
Percent Rejected Service Requests	
<b>Definition:</b>	
Percent Rejected Service Request is the percent of total Local Service Requests (LSRs) received which are rejected due to error or omission. An LSR is considered valid when it is electronically submitted by the CLEC and passes LEO edit checks to insure the data received is correctly formatted and complete.	
<b>Exclusions:</b>	
Service Requests canceled by the CLEC prior to being rejected/clarified.	
<b>Business Rules:</b>	
<p><b>Fully Mechanized:</b> An LSR is considered "rejected" when it is submitted electronically but does not pass LEO edit checks in the ordering systems (EDI, TAG, LEO, LESOG) and is returned to the CLEC. There are two types of "Rejects" in the Mechanized category:</p> <ul style="list-style-type: none"> <li>• A Fatal Reject occurs when a CLEC attempts to electronically submit an LSR but required fields are not populated correctly and the request is returned to the CLEC before it is considered an LSR. Fatal Rejects are included in the calculation for regional reports only.</li> <li>• An Auto Clarification is a valid LSR, which is electronically submitted but rejected from LESOG because it does not pass further edit checks for order accuracy.</li> </ul> <p><b>Partially Mechanized:</b> A valid LSR, which is electronically submitted (via EDI or TAG), but cannot be processed electronically and "falls out" for manual handling. It is then put into "clarification" and (rejected) sent back to the CLEC.</p> <p><b>Total Mechanized:</b> Combination of Fully Mechanized and Partially Mechanized LSRs.</p> <p><b>Non Mechanized:</b> An LSR which is faxed or mailed to the LCSC for processing and is "clarified" (rejected) back to the CLEC by the BST service representative.</p> <p><b>LNP:</b> Under Development</p>	
<b>Calculation:</b>	
Percent Rejected Service Requests = (Total Number of Rejected Service Requests) / (Total Number of Service Requests Received) X 100 during the month.	
<b>Report Structure:</b>	
<ul style="list-style-type: none"> <li>• Fully Mechanized, Partially Mechanized, Total Mechanized, Non-Mechanized</li> <li>• State and Region</li> <li>• CLEC Specific</li> <li>• CLEC Aggregate</li> </ul>	
<b>Level of Disaggregation:</b>	
<ul style="list-style-type: none"> <li>• Resale Residence</li> <li>• Resale Business</li> <li>• Resale Specials</li> <li>• UNE</li> <li>• UNE Loop with NP</li> <li>• Other</li> <li>• Trunks</li> </ul>	
<b>Data Retained Relating to CLEC Experience:</b>	<b>Data Retained Relating to BST Performance:</b>
<ul style="list-style-type: none"> <li>• Report Month</li> <li>• Total number of LSRs</li> <li>• Total number of Rejects</li> <li>• Total Number of Errors</li> <li>• State and Region</li> </ul>	<ul style="list-style-type: none"> <li>• Report Month</li> <li>• Total number of LSRs</li> <li>• Total number of Errors</li> <li>• Adjusted Error Volume</li> <li>• State and Region</li> </ul>
<b>Retail Analog/Benchmark:</b>	
Benchmark is under development. Retail Analog also under development	

Revision date: 09/13/99 (lg)

**ORDERING**

<b>Report/Measurement:</b>	
Reject Interval	
<b>Definition:</b>	
Reject Interval is the average reject time from receipt of an LSR to the distribution of a Reject. An LSR is considered valid when it is electronically submitted by the CLEC and passes LEO edit checks to insure the data received is correctly formatted and complete.	
<b>Exclusions:</b>	
Service Requests canceled by CLEC prior to being rejected/clarified	
<b>Business Rules:</b>	
<p><b>Fully Mechanized:</b> The elapsed time from receipt of a valid LSR (date and time stamp in ED or TAG) until the LSR is rejected (date and time stamp of reject in LEO). Fatal Rejects and Auto Clarifications are considered in the Fully Mechanized category.</p> <p><b>Partially Mechanized:</b> The elapsed time from receipt of a valid LSR (date and time stamp in EDI or TAG) until it falls out for manual handling. The stop time on partially mechanized LSRs is when the LCSC Service Representative clarifies the LSR back to the CLEC via LEO.</p> <p><b>Total Mechanized:</b> Combination of Fully Mechanized and Partially Mechanized LSRs.</p> <p><b>Non-Mechanized:</b> The elapsed time from receipt of a valid LSR (date and time stamp from FAX stamp) until notice of the reject is returned to the CLEC via LON.</p> <p><b>LNP:</b> Under development.</p>	
<b>Calculation:</b>	
$\text{Reject Interval} = \frac{\sum[(\text{Date and Time of Service Request Rejection}) - (\text{Date and Time of Service Request Receipt})]}{(\text{Number of Service Requests Rejected in Reporting Period})}$	
<b>Report Structure:</b>	
<ul style="list-style-type: none"> <li>• CLEC Specific</li> <li>• CLEC Aggregate</li> <li>• Fully Mechanized, Partially Mechanized, Total Mechanized, Non-Mechanized, Trunks</li> </ul>	
<b>Level of Disaggregation:</b>	
<ul style="list-style-type: none"> <li>• Product Reporting Levels <ul style="list-style-type: none"> <li>➢ Interconnection Trunks</li> <li>➢ Resale – Residence</li> <li>➢ Resale – Business</li> <li>➢ Resale – Design</li> <li>➢ UNE Design</li> <li>➢ UNE Non- Design</li> <li>➢ UNE Loop with and w/o NP</li> </ul> </li> <li>• Geographic Scope <ul style="list-style-type: none"> <li>➢ State, Region and further geographic disaggregation as required by State Commission Order</li> </ul> </li> <li>• Mechanized: 0-4 minutes, 4-8 minutes, 8-12 minutes, 12-60 minutes, 0-1 hour 1-8 hours, 8-24 hours, &gt;24 hours.</li> <li>• Non-mechanized: 0-1 hour, 1-4 hours, 4-8 hours, 8-12 hours, 12-16 hours, 16-20 hours, 20-24 hours &gt;24 hours</li> <li>• Average Interval in Days.</li> <li>• Trunks:</li> </ul>	
<b>Data Retained Relating to CLEC Experience:</b>	<b>Data Retained Relating to BST Performance:</b>
<ul style="list-style-type: none"> <li>• Report Month</li> <li>• Reject Interval</li> <li>• Total Number of LSRs</li> <li>• Total number of Errors</li> <li>• State and Region</li> </ul>	<ul style="list-style-type: none"> <li>• Report Month</li> <li>• Reject Interval</li> <li>• Total number of LSRs</li> <li>• Total number of Errors</li> <li>• State and Region</li> </ul>
<b>Retail Analog/Benchmark:</b>	
Benchmark is under development. Retail Analog also under development	

Revision date: 09/13/99 (lg)

**ORDERING**

<b>Report/Measurement:</b>
Firm Order Confirmation Timeliness
<b>Definition:</b>
Interval for Return of a Firm Order Confirmation (FOC Interval) is the average response time from receipt of valid LSR to distribution of a firm order confirmation.
<b>Exclusions:</b>
<ul style="list-style-type: none"> <li>• Rejected LSRs</li> <li>• Partially Mechanized or Non-Mechanized LSRs received and/or FOCd outside of normal business hours.</li> </ul>
<b>Business Rules:</b>
<ul style="list-style-type: none"> <li>• <b>Mechanized</b> - The elapsed time from receipt of a valid electronically submitted LSR (date and time stamp in LENS, EDI, TAG) until the LSR is processed and appropriate service orders are generated in SOCS.</li> <li>• <b>Partially Mechanized</b> - The elapsed time from receipt of a valid electronically submitted LSR which falls out for manual handling by the LCSC personnel until appropriate service orders are issued by a BST service representative via Direct Order Entry (DOE) or Service Order Negotiation Generation System (SONGS) to SOCS.</li> <li>• <b>Total Mechanized</b> - Combination of Fully Mechanized and Partially Mechanized LSRs</li> <li>• <b>Non-Mechanized</b> - The elapsed time from receipt of a valid LSR (fax receive date and time stamp) until appropriate service orders are issued by BST service representative via Direct Order Entry (DOE) or Service Order Negotiation Generation System (SONGS) to SOCS.</li> <li>• <b>LNP</b>: Under development.</li> </ul>
<b>Calculation:</b>
Firm Order Confirmation Timeliness = $\Sigma[(\text{Date and Time of Firm Order Confirmation}) - (\text{Date and Time of Service Request Receipt})] / (\text{Number of Service Requests Confirmed in Reporting Period})$
<b>Report Structure:</b>
<ul style="list-style-type: none"> <li>• Fully Mechanized, Partially Mechanized, Total Mechanized, Non-Mechanized</li> <li>• CLEC Specific</li> <li>• CLEC Aggregate</li> </ul>
<b>Level of Disaggregation:</b>
<ul style="list-style-type: none"> <li>• Product Reporting Levels <ul style="list-style-type: none"> <li>➢ Interconnection Trunks</li> <li>➢ Resale - Residence</li> <li>➢ Resale - Business</li> <li>➢ Resale - Design</li> <li>➢ UNE Design</li> <li>➢ UNE Non- Design</li> <li>➢ UNE Loop with and w/o NP</li> <li>➢ Trunks</li> </ul> </li> <li>• Geographic Scope <ul style="list-style-type: none"> <li>➢ State, Region and further geographic disaggregation (MSA) as required by State Commission Order</li> </ul> </li> <li>• Mechanized: 0-15 minutes, 15-30 minutes, 30-45 minutes, 45-60 minutes, 60-90 minutes, 90-120 minutes, 120-240 minutes, 4-8 hours, 8-12 hours, 12-16 hours, 16-20 hours, 20-24 hours, 24-48 hours, &gt; 48 hours.</li> <li>• Non-mechanized: 0-4 hours, 4-8 hours, 8-12 hours, 12-16 hours, 16-20 hours, 20-24 hours, 24-48 hours, &gt; 48 hours.</li> <li>• Trunks: 0-5 days, 6-8 days, 9-11 days, 12-14 days, 15-17 days, 18-20 days, &gt;20 days</li> <li>• &lt; 10 and &gt; 10 Circuits / Lines</li> <li>• Average Interval in Days.</li> </ul>

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**ORDERING - (Firm Order Confirmation Timeliness – Continued)**

<b>Data Retained Relating to CLEC Experience:</b>	<b>Data Retained Relating to BST Performance:</b>
<ul style="list-style-type: none"><li>• Report Month</li><li>• Interval for FOC</li><li>• Total number of LSRs</li><li>• State and Region</li></ul>	<ul style="list-style-type: none"><li>• Report Month</li><li>• Interval for FOC</li><li>• Total Number of LSRs</li><li>• State and Region</li></ul>
<b>Retail Analog/Benchmark:</b>	
Benchmark is under development. Retail Analog also under development	

Revision date: 09/13/99 (lg)

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**ORDERING**

<b>Report/Measurement:</b>	
Speed of Answer in Ordering Center	
<b>Definition:</b>	
Measures the average time a customer is in queue.	
<b>Exclusions:</b>	
None	
<b>Business Rules:</b>	
The clock starts when the appropriate option is selected (i.e. 1 for Resale Consumer, 2 for Resale Multiline, and 3 for UNE-LNP, etc.) and the call enters the queue for that particular group in the LCSC. The clock stops when a BST service representative in the LCSC answers the call. The speed of answer is determined by measuring and accumulating the elapsed time from the entry of a CLEC call into the BellSouth automatic call distributor (ACD) until the a service representative in BSTs Local Carrier Service Center (LCSC) answers the CLEC call.	
<b>Calculation:</b>	
$(\text{Total time in seconds to reach the LCSC}) / (\text{Total Number of Calls})$ in the Reporting Period.	
<b>Report Structure:</b>	
<ul style="list-style-type: none"> <li>• CLEC Aggregate</li> <li>• BST Aggregate (Combination of Residence Service Center and Business Service Center data under development)</li> </ul>	
<b>Level of Disaggregation:</b>	
<ul style="list-style-type: none"> <li>• CLEC Aggregate</li> <li>• BST Aggregate (Combination of Residence Service Center and Business Service Center data under development)</li> </ul>	
<b>Data Retained Relating to CLEC Experience:</b>	<b>Data Retained Relating to BST Performance:</b>
<ul style="list-style-type: none"> <li>• Mechanized tracking through LCSC Automatic Call Distributor</li> </ul>	<ul style="list-style-type: none"> <li>• Mechanized tracking through BST Retail center support systems</li> </ul>
<b>Retail Analog/Benchmark:</b>	
For CLEC, Speed of Answer in Ordering Center (LCSC) is comparable to Speed of Answer in BST Business Offices.	

Revision date: 09/13/99 (lg)

**PROVISIONING**

<b>Report/Measurement:</b>
Mean Held Order Interval & Distribution Intervals
<b>Definition:</b>
When delays occur in completing CLEC orders, the average period that CLEC orders are held for BST reasons, pending a delayed completion, should be no worse for the CLEC when compared to BST delayed orders.
<b>Exclusions:</b>
<ul style="list-style-type: none"> <li>• Any order canceled by the CLEC will be excluded from this measurement.</li> <li>• Order Activities of BST associated with internal or administrative use of local services.</li> </ul>
<b>Business Rules:</b>
<p><b>Mean Held Order Interval:</b> This metric is computed at the close of each report period. The held order interval is established by first identifying all orders, at the close of the reporting interval, that both have not been reported as completed in SOCS and have passed the currently committed due date for the order. For each such order, the number of calendar days between the committed due date and the close of the reporting period is established and represents the held order interval for that particular order. The held order interval is accumulated by the standard groupings, unless otherwise noted, and the reason for the order being held. The total number of days accumulated in a category is then divided by the number of held orders within the same category to produce the mean held order interval.</p> <p>CLEC Specific reporting is by type of held order (facilities, equipment, other), total number of orders held, and the total and average days.</p> <p><b>Held Order Distribution Interval:</b> This measure provides data to report total days held and identifies these in categories of &gt;15 days and &gt; 90 days. (orders counted in &gt;90 days are also included in &gt;15 days).</p>
<b>Calculation:</b>
<p><b>Mean Held Order Interval:</b>  <math display="block">\frac{\sum (\text{Reporting Period Close Date} - \text{Committed Order Due Date})}{(\text{Number of Orders Pending and Past The Committed Due Date})}</math> for all orders pending and past the committed due date.</p> <p><b>Held Order Distribution Interval:</b>  <math display="block">\frac{(\# \text{ of Orders Held for } \geq 90 \text{ days})}{(\text{Total } \# \text{ of Orders Pending But Not Completed})} \times 100</math> <math display="block">\frac{(\# \text{ of Orders Held for } \geq 15 \text{ days})}{(\text{Total } \# \text{ of Orders Pending But Not Completed})} \times 100</math></p>
<b>Report Structure:</b>
<ul style="list-style-type: none"> <li>• CLEC Specific</li> <li>• CLEC Aggregate</li> <li>• BST Aggregate</li> </ul>
<b>Level of Disaggregation:</b>
<ul style="list-style-type: none"> <li>• Product Reporting Levels <ul style="list-style-type: none"> <li>➢ POTS – Residence</li> <li>➢ POTS – Business</li> <li>➢ DESIGN</li> <li>➢ PBX</li> <li>➢ CENTREX</li> <li>➢ ISDN</li> <li>➢ UNE 2 Wire Loop with NP (Design and Non-Design)</li> <li>➢ UNE 2 Wire Loop without NP (Design and Non-Design)</li> <li>➢ UNE Loop Other with NP (Design and Non-Design)</li> <li>➢ UNE Loop Other without NP (Design and Non-Design)</li> <li>➢ UNE Other (Design and Non-Design)</li> <li>➢ Switching (Under development)</li> <li>➢ Local Transport (Under development)</li> <li>➢ Combos (Under development)</li> <li>➢ NP (Under development as separate category)</li> <li>➢ Local Interconnection Trunks</li> </ul> </li> <li>• Geographic Scope <ul style="list-style-type: none"> <li>➢ State, Region, and further geographic disaggregation (MSA) as required by State Commission Order</li> </ul> </li> </ul>

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**PROVISIONING – (Mean Held Order Interval & Distribution Intervals – Continued)**

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
<ul style="list-style-type: none"> <li>• Report Month</li> <li>• CLEC Order Number and PON (PON)</li> <li>• Order Submission Date (TICKET_ID)</li> <li>• Committed Due Date (DD)</li> <li>• Service Type(CLASS_SVC_DESC)</li> <li>• Hold Reason</li> <li>• Total line/circuit count (under development)</li> <li>• Geographic Scope</li> </ul>	<ul style="list-style-type: none"> <li>• Report Month</li> <li>• BST Order Number</li> <li>• Order Submission Date</li> <li>• Committed Due Date</li> <li>• Service Type</li> <li>• Hold Reason</li> <li>• Geographic Scope</li> </ul>
<p><b>NOTE:</b> Code in parentheses is the corresponding header found in the raw data file.</p>	
<p><b>Retail Analog/Benchmark:</b></p>	
<p>CLEC Residence Resale / BST Residence Retail            CLEC Business Resale / BST Business Retail            CLEC Design / BST Design            CLEC PBX, CENTREX, ISDN/ BST PBX, CENTREX, ISDN            Interconnection Trunks-CLEC / Interconnection Trunks –BST            UNES-Retail Analog (under development at this time)</p>	

Revision date: 06/24/99 (taf)

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**PROVISIONING**

<b>Report/Measurement:</b>
Average Jeopardy Notice Interval & Percentage of Orders Given Jeopardy Notice
<b>Definition:</b>
When BST can determine in advance that a committed due date is in jeopardy, it will provide advance notice to the CLEC.
<b>Exclusions:</b>
<ul style="list-style-type: none"> <li>• Any order canceled by the CLEC will be excluded from this measurement</li> <li>• Orders held for CLEC end user reasons</li> <li>• Orders submitted to BST through non-mechanized methods</li> </ul>
<b>Business Rules:</b>
When BST can determine in advance that a committed due date is in jeopardy it will provide advance notice to the CLEC. The number of committed orders in a report period is the number of orders that have a due date in the reporting period.
<b>Calculation:</b>
<p><b>Average Jeopardy Interval</b> = <math>\Sigma [ (\text{Date and Time of Scheduled Due Date on Service Order}) - (\text{Date and Time of Jeopardy Notice}) ] / (\text{Number of Orders Notified of Jeopardy in Reporting Period})</math>.</p> <p><b>Percent of Orders Given Jeopardy Notice</b> = <math>\Sigma [ (\text{Number of Orders Given Jeopardy Notices in Reporting Period}) / (\text{Number of Orders Confirmed (due) in Reporting Period})</math></p>
<b>Report Structure:</b>
<ul style="list-style-type: none"> <li>• CLEC Specific and CLEC Aggregate</li> <li>• BST Aggregate (under development with estimated release date of 8/15/99 for June reporting)</li> </ul>
<b>Level of Disaggregation:</b>
<ul style="list-style-type: none"> <li>• Product Reporting Levels <ul style="list-style-type: none"> <li>➢ POTS – Residence</li> <li>➢ POTS – Business</li> <li>➢ DESIGN</li> <li>➢ PBX</li> <li>➢ CENTREX</li> <li>➢ ISDN</li> <li>➢ UNE 2 Wire Loop with NP (Design and Non-Design)</li> <li>➢ UNE 2 Wire Loop without NP (Design and Non-Design)</li> <li>➢ UNE Loop Other with NP (Design and Non-Design)</li> <li>➢ UNE Loop Other without NP (Design and Non-Design)</li> <li>➢ UNE Other (Design and Non-Design)</li> <li>➢ Switching (Under development)</li> <li>➢ Local Transport (Under development)</li> <li>➢ Combos (Under development)</li> <li>➢ NP (Under development as separate category)</li> <li>➢ Local Interconnection Trunks</li> <li>➢ Geographic Scope</li> <li>➢ State, Region, and further geographic disaggregation (MSA) as required by State Commission Order</li> </ul> </li> </ul>

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**PROVISIONING –**  
**(Average Jeopardy Notice Interval & Percentage of Orders Given Jeopardy Notice – Continued)**

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
<ul style="list-style-type: none"> <li>• Report Month</li> <li>• CLEC Order Number and PON</li> <li>• Date and Time Jeopardy Notice sent</li> <li>• Committed Due Date</li> <li>• Service Type</li> </ul>	<ul style="list-style-type: none"> <li>• Report Month</li> <li>• CLEC Order Number and PON</li> <li>• Date and Time Jeopardy Notice sent</li> <li>• Committed Due Date</li> <li>• Service Type</li> </ul>
<p>NOTE: Code in parentheses is the corresponding header found in the raw data file.</p>	<p>NOTE: Code in parentheses is the corresponding header found in the raw data file.</p>
<p><b>Retail Analog/Benchmark:</b></p> <ul style="list-style-type: none"> <li>CLEC Residence Resale / BST Residence Retail</li> <li>CLEC Business Resale / BST Business Retail</li> <li>CLEC Design / BST Design</li> <li>CLEC PBX, CENTREX, ISDN/ BST PBX, CENTREX, ISDN</li> <li>Interconnection Trunks-CLEC / Interconnection Trunks –BST</li> <li>UNEs-Retail Analog (under development at this time)</li> </ul>	

Revision date: 09/15/99 (taf)

**PROVISIONING**

<b>Report/Measurement:</b>
Percent Missed Installation Appointments
<b>Definition:</b>
“Percent missed installation appointments” monitors the reliability of BST commitments with respect to committed due dates to assure that CLECs can reliably quote expected due dates to their retail customer as compared to BST.
<b>Exclusions:</b>
<ul style="list-style-type: none"> <li>• Canceled Service Orders</li> <li>• Order Activities of BST or the CLEC associated with internal or administrative use of local services (Record Orders, Test Orders, etc.)</li> <li>• Disconnect (D) &amp; From (F) orders</li> </ul>
<b>Business Rules:</b>
Percent Missed Installation Appointments is the percentage of total orders processed for which BST is unable to complete the service orders on the committed due dates. Missed Appointments caused by end-user reasons will be included and reported separately. A business day is any time period within the same date frame, which means there cannot be a cutoff time for commitments as certain types of orders are requested to be worked after standard business hours. Also, during Daylight Savings Time, field technicians are scheduled until 9PM in some areas and the customer is offered a greater range of intervals from which to select.
<b>Calculation:</b>
Percent Missed Installation Appointments = $\Sigma$ (Number of Orders Not Complete by Committed Due Date in Reporting Period) / (Number of Orders Completed in Reporting Period) X 100
<b>Report Structure:</b>
<ul style="list-style-type: none"> <li>• CLEC Specific</li> <li>• CLEC Aggregate</li> <li>• BST Aggregate</li> </ul>
<b>Report explanation:</b> The difference between End User MA and Total MA is the result of BST caused misses. Here, Total MA is the total % of orders missed either by BST or CLEC end user and End User MA represents the percentage of orders missed by the end user

**PROVISIONING – (Percent Missed Installation Appointments – Continued)**

<b>Level of Disaggregation:</b> <ul style="list-style-type: none"> <li>• Reported in categories of &lt;10 line/circuits; &gt; 10 line/circuits</li> <li>• Dispatch / No Dispatch</li> <li>• Product Reporting Levels <ul style="list-style-type: none"> <li>➢ POTS – Residence</li> <li>➢ POTS – Business</li> <li>➢ DESIGN</li> <li>➢ PBX</li> <li>➢ CENTREX</li> <li>➢ ISDN</li> <li>➢ UNE 2 Wire Loop with NP (Design and Non-Design)</li> <li>➢ UNE 2 Wire Loop without NP (Design and Non-Design)</li> <li>➢ UNE Loop Other with NP (Design and Non-Design)</li> <li>➢ UNE Loop Other without NP (Design and Non-Design)</li> <li>➢ UNE Other (Design and Non-Design)</li> <li>➢ Switching (Under development)</li> <li>➢ Local Transport (Under development)</li> <li>➢ Combos (Under development)</li> <li>➢ NP (Under development as separate category)</li> <li>➢ Local Interconnection Trunks</li> <li>➢ Geographic Scope</li> <li>➢ State, Region, and further geographic disaggregation (MSA) as required by State Commission Order</li> </ul> </li> </ul>	
<b>Data Retained Relating to CLEC Experience</b> <ul style="list-style-type: none"> <li>• Report Month</li> <li>• CLEC Order Number and PON (PON)</li> <li>• Committed Due Date (DD)</li> <li>• Completion Date (CMPLTN DD)</li> <li>• Status Type</li> <li>• Status Notice Date</li> <li>• Standard Order Activity</li> <li>• Geographic Scope</li> </ul>	<b>Data Retained Relating to BST Experience</b> <ul style="list-style-type: none"> <li>• Report Month</li> <li>• BST Order Number</li> <li>• Committed Due Date</li> <li>• Completion Date</li> <li>• Status Type</li> <li>• Status Notice Date</li> <li>• Standard Order Activity</li> <li>• Geographic Scope</li> </ul>
<p><b>NOTE:</b> Code in parentheses is the corresponding header found in the raw data file.</p>	
<b>Retail Analog/Benchmark:</b> <ul style="list-style-type: none"> <li>CLEC Residence Resale / BST Residence Retail</li> <li>CLEC Business Resale / BST Business Retail</li> <li>CLEC Design / BST Design</li> <li>CLEC PBX, CENTREX, ISDN/ BST PBX, CENTREX, ISDN</li> <li>Interconnection Trunks-CLEC / Interconnection Trunks –BST</li> <li>UNEs-Retail Analog (under development at this time)</li> </ul>	

Revision date: 06/24/99 (taf)

**PROVISIONING**

<b>Report/Measurement :</b>
Average Completion Interval (OCI) & Order Completion Interval Distribution
<b>Definition:</b>
The "average completion interval" measure monitors the interval of time it takes BST to provide service for the CLEC or its' own customers. The "Order Completion Interval Distribution" provides the percentage of orders completed within certain time periods.
<b>Exclusions:</b>
<ul style="list-style-type: none"> <li>• Canceled Service Orders</li> <li>• Order Activities of BST or the CLEC associated with internal or administrative use of local services (Record Orders, Test Orders, etc.)</li> <li>• D (Disconnect) and F (From) orders. (From is disconnect side of a move order when the customer moves to a new address).</li> <li>• "L" Appointment coded orders (where the customer has requested a later than offered interval)</li> </ul>
<b>Business Rules:</b>
The actual completion interval is determined for each order processed during the reporting period. The completion interval is the elapsed time from when the order is electronically entered into SOCS after the FOC on a CLEC order, or the date time stamp receipt into SOCS by BST on retail orders to the order completion date. The clock starts when a valid order number is assigned by SOCS and stops when the technician or system completes the order in SOCS. Elapsed time for each order is accumulated for each reporting dimension. The accumulated time for each reporting dimension is then divided by the associated total number of orders completed
<b>Calculation:</b>
<b>Average Completion Interval:</b> $\frac{\sum [ (\text{Completion Date \& Time}) - (\text{Order Issue Date \& Time}) ]}{\sum (\text{Count of Orders Completed in Reporting Period})}$
<b>Order Completion Interval Distribution:</b> $\frac{\sum (\text{Service Orders Completed in "X" days})}{(\text{Total Service Orders Completed in Reporting Period})} \times 100$
<b>Report Structure:</b>
<ul style="list-style-type: none"> <li>• CLEC Specific</li> <li>• CLEC Aggregate</li> <li>• BST Aggregate</li> </ul>

**PROVISIONING –  
(Average Completion Interval (OCI) & Order Completion Interval Distribution – Continued)**

<b>Level of Disaggregation:</b> <ul style="list-style-type: none"> <li>• Dispatch/No Dispatch categories applicable to all levels except trunks.</li> <li>• Residence &amp; Business reported in day intervals = 0,1,2,3,4, 5, 5+</li> <li>• UNE and Design reported in day intervals = 0-5, 5-10, 10-15, 15-20, 20-25, 25-30, 30+</li> <li>• All Levels are reported &lt;10 line/circuits; &gt;10 line/circuits</li> <li>• Product Reporting Levels <ul style="list-style-type: none"> <li>➤ POTS – Residence</li> <li>➤ POTS – Business</li> <li>➤ DESIGN</li> <li>➤ PBX</li> <li>➤ CENTREX</li> <li>➤ ISDN</li> <li>➤ UNE 2 Wire Loop with NP (Design and Non-Design)</li> <li>➤ UNE 2 Wire Loop without NP (Design and Non-Design)</li> <li>➤ UNE Loop Other with NP (Design and Non-Design)</li> <li>➤ UNE Loop Other without NP (Design and Non-Design)</li> <li>➤ UNE Other (Design and Non-Design)</li> <li>➤ Switching (Under development)</li> <li>➤ Local Transport (Under development)</li> <li>➤ Combos (Under development)</li> <li>➤ NP (Under development as separate category)</li> <li>➤ Local Interconnection Trunks</li> <li>➤ Geographic Scope</li> <li>➤ State, Region, and further geographic disaggregation (MSA) as required by State Commission Order</li> </ul> </li> </ul>	
<b>Data Retained Relating to CLEC Experience</b> <ul style="list-style-type: none"> <li>• Report Month</li> <li>• CLEC Company Name</li> <li>• Order Number (PON)</li> <li>• Submission Date &amp; Time (TICKET_ID)</li> <li>• Completion Date (CMPLTN_DT)</li> <li>• Service Type (CLASS_SVC_DESC)</li> <li>• Geographic Scope</li> </ul>	<b>Data Retained Relating to BST Experience</b> <ul style="list-style-type: none"> <li>• Report Month</li> <li>• CLEC Order Number</li> <li>• Order Submission Date &amp; Time</li> <li>• Order Completion Date &amp; Time</li> <li>• Service Type</li> <li>• Geographic Scope</li> </ul>
<p><b>NOTE:</b> Code in parentheses is the corresponding header found in the raw data file.</p>	
<b>Retail Analog/Benchmark</b> <ul style="list-style-type: none"> <li>CLEC Residence Resale / BST Residence Retail</li> <li>CLEC Business Resale / BST Business Retail</li> <li>CLEC Non-UNE Design / BST Design</li> <li>CLEC PBX, CENTREX, ISDN/ BST PBX, CENTREX, ISDN</li> <li>Interconnection Trunks-CLEC / Interconnection Trunks-BST</li> <li>UNEs-Retail Analog (under development at this time)</li> </ul>	

Revision date: 09/08/99 (taf)

**PROVISIONING**

<b>Report/Measurement:</b>
Average Completion Notice Interval
<b>Definition:</b>
The Completion Notice Interval is the elapsed time between the BST reported completion of work and the issuance of a valid completion notice to the CLEC.
<b>Exclusions:</b>
<ul style="list-style-type: none"> <li>• Non-mechanized Orders</li> <li>• Cancelled Service Orders</li> <li>• Order Activities of BST associated with internal or administrative use of local services</li> <li>• D &amp; F orders</li> </ul>
<b>Business Rules:</b>
Measurement of interval of completion date and time by a field technician on dispatched orders, and SPM on the due date for non-dispatched orders; to the release of a notice to the CLEC/BST of the completion status. On all orders (mechanized and non-mechanized) the field technician notifies the CLEC by telephone the work was complete and then he enters the work order completion information and completion time in his computer. This information switches through to the SOCS systems either completing the order or rejecting the order to the Work Management Center (WMC). If the completion is rejected, it is manually corrected and then completed by the WMC. The notice is returned on each individual order submitted and as the notice is sent electronically, it can only be switched to those orders that were submitted by the CLEC electronically.
<b>Calculation:</b>
$\frac{\Sigma (\text{Date and Time of Notice of Completion}) - (\text{Date and Time of Work Completion})}{(\text{Number of Orders Completed in Reporting Period})}$
<b>Report Structure:</b>
<ul style="list-style-type: none"> <li>• CLEC Specific</li> <li>• CLEC Aggregate</li> <li>• BST Aggregate (in development-expected release date 08/15/99 reporting)</li> </ul>
<b>Level of Disaggregation:</b>
<ul style="list-style-type: none"> <li>• Reporting intervals in Hours: 0-1, 1-2, 2-4, 4-8, 8-12, 12-24, &gt; 24, plus Overall Average Hour Interval</li> <li>• Reported in categories of &lt;10 line/circuits; &gt; 10 line/circuits</li> <li>• Product Reporting Levels <ul style="list-style-type: none"> <li>&gt; POTS – Residence</li> <li>&gt; POTS – Business</li> <li>&gt; DESIGN</li> <li>&gt; PBX</li> <li>&gt; CENTREX</li> <li>&gt; ISDN</li> <li>&gt; UNE 2 Wire Loop with NP (Design and Non-Design)</li> <li>&gt; UNE 2 Wire Loop without NP (Design and Non-Design)</li> <li>&gt; UNE Loop Other with NP (Design and Non-Design)</li> <li>&gt; UNE Loop Other without NP (Design and Non-Design)</li> <li>&gt; UNE Other (Design and Non-Design)</li> <li>&gt; Switching (Under development)</li> <li>&gt; Local Transport (Under development)</li> <li>&gt; Combos (Under development)</li> <li>&gt; NP (Under development as separate category)</li> <li>&gt; Local Interconnection Trunks</li> <li>&gt; Geographic Scope</li> <li>&gt; State, Region, and further geographic disaggregation (MSA) as required by State Commission Order</li> </ul> </li> </ul>

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**PROVISIONING – (Average Completion Notice Interval – Continued)**

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
<ul style="list-style-type: none"> <li>• Report Month</li> <li>• CLEC Order Number</li> <li>• Work Completion Date</li> <li>• Work Completion Time</li> <li>• Completion Notice Availability Date</li> <li>• Completion Notice Availability Time</li> <li>• Service Type</li> <li>• Activity Type</li> <li>• Geographic Scope</li> </ul> <p><b>NOTE:</b> Code in parentheses is the corresponding header found in the raw data file.</p>	<ul style="list-style-type: none"> <li>• Report Month</li> <li>• Service Order Number</li> <li>• Work Completion Date</li> <li>• Work Completion Time</li> <li>• Completion Notice Availability Date</li> <li>• Completion Notice Availability Time</li> <li>• Service Type</li> <li>• Activity Type</li> <li>• Geographic Scope</li> </ul> <p><b>NOTE:</b> Code in parentheses is the corresponding header found in the raw data file.</p>
<p><b>Retail Analog/Benchmark:</b></p> <ul style="list-style-type: none"> <li>CLEC Residence Resale / BST Residence Retail</li> <li>CLEC Business Resale / BST Business Retail</li> <li>CLEC Non-UNE Design / BST Design</li> <li>CLEC PBX, CENTREX, ISDN/ BST PBX, CENTREX, ISDN</li> <li>Interconnection Trunks-CLEC / Interconnection Trunks-BST</li> <li>UNEs-Retail Analog (under development at this time)</li> </ul>	

Revision date: 09/15/99 (taf)

**PROVISIONING**

<b>Report/Measurement:</b>	
Coordinated Customer Conversions	
<b>Definition:</b>	
This category measures the average time it takes BST to disconnect an unbundled loop from the BST switch and cross connect it to a CLEC's equipment. This measurement applies to service orders with and without NP, and where the CLEC has requested BST to provide a coordinated cutover.	
<b>Exclusions:</b>	
<ul style="list-style-type: none"> <li>• Any order canceled by the CLEC will be excluded from this measurement.</li> <li>• Delays due to CLEC following disconnection of the unbundled loop</li> <li>• Unbundled Loops where there is no existing subscriber loop</li> </ul>	
<b>Business Rules:</b>	
Where the service order includes NP, the interval includes the total time for the cutover including the translation time to place the line back in service on the ported line. The interval is calculated for the entire cutover time for the service order and then divided by items worked in that time to give the average per item interval for each service order.	
<b>Calculation:</b>	
$\frac{\Sigma [(Completion\ Date\ and\ Time\ for\ Cross\ Connection\ of\ an\ Unbundled\ Loop) - (Disconnection\ Date\ and\ Time\ of\ an\ Unbundled\ Loop)]}{Total\ Number\ of\ Unbundled\ Loop\ Items\ for\ the\ reporting\ period.}$	
<b>Report Structure:</b>	
<ul style="list-style-type: none"> <li>• CLEC Specific</li> <li>• CLEC Aggregate</li> </ul>	
<b>Level of Disaggregation:</b>	
<ul style="list-style-type: none"> <li>• Reported in intervals &lt;=5 minutes; &gt;5,&lt;15 minutes; &gt;15 minutes, plus Overall Average interval</li> <li>• Product Reporting Levels <ul style="list-style-type: none"> <li>&gt; UNE Loops without NP</li> <li>&gt; UNE Loops with NP</li> <li>&gt; Geographic Scope</li> <li>&gt; State, Region, and further geographic disaggregation as required by State Commission Order</li> </ul> </li> </ul>	
<b>Data Retained Relating to CLEC Experience</b>	<b>Data Retained Relating to BST Experience</b>
<ul style="list-style-type: none"> <li>• Report Month</li> <li>• CLEC Order Number</li> <li>• Committed Due Date (DD)</li> <li>• Service Type (CLASS_SVC_DESC)</li> <li>• Cutover Start Time</li> <li>• Cutover Completion time</li> <li>• Portability start and completion times (NP orders)</li> <li>• Total Items</li> </ul>	<ul style="list-style-type: none"> <li>• No BST Analog Exists</li> </ul>
<b>NOTE:</b> Code in parentheses is the corresponding header found in the raw data file.	
<b>Retail Analog/Benchmark:</b>	
There is no retail analog for this measurement because it measures cutting loops to the CLEC. Benchmark under development.	

Revision date: 09/09/99 (taf)

**PROVISIONING**

<b>Report/Measurement:</b>
% Provisioning Troubles within 30 days of Service Order Activity
<b>Definition:</b>
Percent Provisioning Troubles within 30 days of Installation measures the quality and accuracy of installation activities.
<b>Exclusions:</b>
<ul style="list-style-type: none"> <li>• Canceled Service Orders</li> <li>• Order Activities of BST or the CLEC associated with internal or administrative use of local services (R Orders, Test Orders, etc.)</li> <li>• D &amp; F orders</li> </ul>
<b>Business Rules:</b>
Measures the quality and accuracy of completed orders. The first trouble report from a service order after completion is counted in this measure. Subsequent trouble reports are measured in Repeat Report Rate. Reports are calculated searching in the prior report period for completed service orders and following 30 days after completion for a trouble report. D & F orders are excluded as there is no subsequent activity following a disconnect.
<b>Calculation:</b>
$\% \text{ Provisioning Troubles within 30 days of Service Order Activity} = \frac{\Sigma (\text{Trouble reports on all completed orders} \leq 30 \text{ days following service order(s) completion})}{(\text{All Service Orders completed in the calendar month})} \times 100$
<b>Report Structure:</b>
<ul style="list-style-type: none"> <li>• CLEC Specific, CLEC Aggregate, BST Aggregate</li> </ul>
<b>Level of Disaggregation:</b>
<ul style="list-style-type: none"> <li>• Reported in categories of &lt;10 line/circuits; &gt; 10 line/circuits</li> <li>• Dispatch / No Dispatch</li> <li>• Product Reporting Levels <ul style="list-style-type: none"> <li>➢ POTS – Residence</li> <li>➢ POTS – Business</li> <li>➢ DESIGN</li> <li>➢ PBX</li> <li>➢ CENTREX</li> <li>➢ ISDN</li> <li>➢ UNE 2 Wire Loop with NP (Design and Non-Design)</li> <li>➢ UNE 2 Wire Loop without NP (Design and Non-Design)</li> <li>➢ UNE Loop Other with NP (Design and Non-Design)</li> <li>➢ UNE Loop Other without NP (Design and Non-Design)</li> <li>➢ UNE Other (Design and Non-Design)</li> <li>➢ Switching (Under development)</li> <li>➢ Local Transport (Under development)</li> <li>➢ Combos (Under development)</li> <li>➢ NP (Under development as separate category)</li> <li>➢ Local Interconnection Trunks</li> <li>➢ Geographic Scope</li> <li>➢ State, Region, and further geographic disaggregation (MSA) as required by State Commission Order</li> </ul> </li> </ul>

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**PROVISIONING – (% Provisioning Troubles within 30 days of Service Order Activity – Continued)**

<b>Data Retained Relating to CLEC Experience</b>	<b>Data Retained Relating to BST Experience</b>
<ul style="list-style-type: none"> <li>• Report Month</li> <li>• CLEC Order Number and PON</li> <li>• Order Submission Date(TICKET_ID)</li> <li>• Order Submission Time (TICKET_ID)</li> <li>• Status Type</li> <li>• Status Notice Date</li> <li>• Standard Order Activity</li> <li>• Geographic Scope</li> </ul> <p>NOTE: Code in parentheses is the corresponding header found in the raw data file.</p>	<ul style="list-style-type: none"> <li>• Report Month</li> <li>• BST Order Number</li> <li>• Order Submission Date</li> <li>• Order Submission Time</li> <li>• Status Type</li> <li>• Status Notice Date</li> <li>• Standard Order Activity</li> <li>• Geographic Scope</li> </ul>
<b>Retail Analog/Benchmark:</b>	
CLEC Residence Resale / BST Residence Retail CLEC Business Resale / BST Business Retail CLEC Design / BST Design CLEC PBX, CENTREX, ISDN/ BST PBX, CENTREX, ISDN Interconnection Trunks-CLEC / Interconnection Trunks –BST UNES-Retail Analog (Under Development at this time)	

Revision date: 09/09/99 (taf)

**PROVISIONING**

<b>Report/Measurement :</b>
Total Service Order Cycle Time (TSOCT) (under development 3Q99)
<b>Definition:</b>
This is a new measurement under development to measure the total service order cycle time from receipt of a valid service order request to the completion of the service order.
<b>Exclusions:</b>
<ul style="list-style-type: none"> <li>• Canceled Service Orders</li> <li>• Order Activities of BST or the CLEC associated with internal or administrative use of local services (Record Orders, Test Orders, etc.)</li> <li>• D (Disconnect) and F (From) orders. (From is disconnect side of a move order when the customer moves to a new address).</li> <li>• "L" Appointment coded orders (where the customer has requested a later than offered interval)</li> <li>• Orders with CLEC/Subscriber caused delays or CLEC/Subscriber requested due date changes.</li> </ul>
<b>Business Rules:</b>
The interval is determined for each order processed during the reporting period. This measurement combines two reports: FOC (Firm Order Confirmation) with Average Order Completion Interval. This interval starts with the receipt of a valid service order request and stops when the technician or system completes the order in SOCS. Elapsed time for each order is accumulated for each reporting dimension. The accumulated time for each reporting dimension is then divided by the associated total number of orders completed
<b>Calculation :</b>
Total Service Order Cycle Time (under development)
<b>Report Structure:</b>
<ul style="list-style-type: none"> <li>• CLEC Specific</li> <li>• CLEC Aggregate</li> <li>• BST Aggregate</li> </ul>
<b>Level of Disaggregation:</b>
<ul style="list-style-type: none"> <li>• ISDN Orders included in Non Design - GA Only</li> <li>• Dispatch/No Dispatch categories applicable to all levels except trunks.</li> <li>• Intervals under development</li> <li>• Product Reporting Levels <ul style="list-style-type: none"> <li>➢ Interconnection Trunks</li> <li>➢ POTS – Residence</li> <li>➢ POTS – Business</li> <li>➢ DESIGN</li> <li>➢ PBX</li> <li>➢ CENTREX</li> <li>➢ ISDN</li> <li>➢ UNE 2 Wire Loop with NP (Design and Non-Design)</li> <li>➢ UNE 2 Wire Loop without NP (Design and Non-Design)</li> <li>➢ UNE Loop Other with NP (Design and Non-Design)</li> <li>➢ UNE Loop Other without NP (Design and Non-Design)</li> <li>➢ UNE Other (Design and Non-Design)</li> <li>➢ Switching (Under development)</li> <li>➢ Local Transport (Under development)</li> <li>➢ Combos (Under development)</li> <li>➢ NP (Under development as separate category)</li> <li>➢ Local Interconnection Trunks</li> </ul> </li> <li>• Geographic Scope <ul style="list-style-type: none"> <li>➢ State, Region and further geographic disaggregation as required by State Commission Order</li> </ul> </li> </ul>

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**PROVISIONING – (Total Service Order Cycle Time (TSOCT) – Continued)**

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
<ul style="list-style-type: none"> <li>• Report Month</li> <li>• Interval for FOC</li> <li>• CLEC Company Name</li> <li>• Order Number (PON)</li> <li>• Submission Date &amp; Time (TICKET_ID)</li> <li>• Completion Date (Cmpltn_DT)</li> <li>• Service Type (CLASS_SVC_DESC)</li> <li>• Geographic Scope</li> </ul> <p><b>NOTE:</b> Code in parentheses is the corresponding header found in the raw data file.</p>	<ul style="list-style-type: none"> <li>• Report Month</li> <li>• CLEC Order Number</li> <li>• Order Submission Date &amp; Time</li> <li>• Order Completion Date &amp; Time</li> <li>• Service Type</li> <li>• Geographic Scope -</li> </ul>
<b>Retail Analog/Benchmark</b>	
Under development (BST retail analog available at this time would be Average Completion Interval)	

Revision date: 09/08/99 (taf)

**MAINTENANCE & REPAIR**

<b>Report/Measurement:</b>	
Missed Repair Appointments	
<b>Definition:</b>	
The percent of trouble reports not cleared by the committed date and time.	
<b>Exclusions:</b>	
<ul style="list-style-type: none"> <li>• Trouble tickets canceled at the CLEC request.</li> <li>• BST trouble reports associated with internal or administrative service.</li> <li>• Customer Provided Equipment (CPE) troubles or CLEC Equipment Trouble.</li> </ul>	
<b>Business Rules:</b>	
<p>The negotiated commitment date and time is established when the repair report is received. The cleared time is the date and time that BST personnel clear the trouble and closes the trouble report in his Computer Access Terminal (CAT) or workstation. If this is after the Commitment time, the report is flagged as a "Missed Commitment" or a missed repair appointment. When the data for this measure is collected for BST and a CLEC, it can be used to compare the percentage of the time repair appointments are missed due to BST reasons. Note: Appointment intervals vary with force availability in the POTS environment. Specials and Trunk intervals are standard interval appointments of no greater than 24 hours.</p>	
<b>Calculation:</b>	
$\text{Percentage of Missed Repair Appointments} = \frac{\Sigma (\text{Count of Customer Troubles Not Cleared by the Quoted Commitment Date and Time})}{\Sigma (\text{Total Trouble reports closed in Reporting Period})} \times 100$	
<b>Report Structure:</b>	
<ul style="list-style-type: none"> <li>• CLEC Specific</li> <li>• CLEC Aggregate</li> <li>• BST Aggregate</li> </ul>	
<b>Level of Disaggregation:</b>	
<p><b>ISDN Troubles included in Non-Design – GA ONLY</b></p> <ul style="list-style-type: none"> <li>• Product Reporting Levels <ul style="list-style-type: none"> <li>➢ POTS – Residence, Business</li> <li>➢ Design</li> <li>➢ PBX, CENTREX and ISDN</li> <li>➢ UNE 2 Wire Loop (Design and Non – Design)</li> <li>➢ UNE Loop Other (Design and Non Design)</li> <li>➢ UNE Other (Design and Non – Design)</li> <li>➢ Switching, Local Transport and Combos (under development)</li> <li>➢ Local Interconnection Trunks</li> </ul> </li> <li>• Dispatch/No Dispatch categories applicable to all product levels</li> <li>• Geographic Scope <ul style="list-style-type: none"> <li>➢ State, Region and further geographic disaggregation as required by State Commission Order (e.g. Metropolitan Service Area - MSA)</li> </ul> </li> </ul>	
<b>Data Retained Relating to CLEC Experience</b>	<b>Data Retained Relating to BST Experience</b>
<ul style="list-style-type: none"> <li>• Report Month</li> <li>• CLEC Company Name</li> <li>• Submission Date &amp; Time ( TICKET_ID)</li> <li>• Completion Date (CMPLTN_DT)</li> <li>• Service Type (CLASS_SVC_DESC)</li> <li>• Disposition and Cause (CAUSE_CD &amp; CAUSE_DESC)</li> <li>• Geographic Scope</li> </ul>	<ul style="list-style-type: none"> <li>• Report Month</li> <li>• BST Company Code</li> <li>• Submission Date &amp; Time</li> <li>• Completion Date</li> <li>• Service Type</li> <li>• Disposition and Cause (Non-Design / Non-Special Only)</li> <li>• Trouble Code (Design and Trunking Services)</li> <li>• Geographic Scope</li> </ul>
<p><b>NOTE:</b> Code in parentheses is the corresponding header found in the raw data file.</p>	

**MAINTENANCE & REPAIR – (Missed Repair Appointments – Continued)**

**Retail Analog/Benchmark**

CLEC Residence-Resale / BST Residence-Retail  
CLEC Business-Resale / BST Business-Retail  
CLEC Design-Resale / BST Design-Retail  
CLEC PBX, Centrex, and ISDN Resale/ BST PBX, Centrex, and ISDN Retail  
CLEC Trunking-Resale / BST Trunking-Retail  
UNEs - Retail Analog (under development at this time.)

Revision date: 06/09/99 (see)

**MAINTENANCE & REPAIR**

<b>Report/Measurement:</b>	
Customer Trouble Report Rate	
<b>Definition:</b>	
Initial and repeated customer direct or referred troubles reported within a calendar month per 100 lines/circuits in service.	
<b>Exclusions:</b>	
<ul style="list-style-type: none"> <li>• Trouble tickets canceled at the CLEC request.</li> <li>• BST trouble reports associated with administrative service.</li> <li>• Customer provided Equipment (CPE) troubles or CLEC equipment troubles.</li> </ul>	
<b>Business Rules:</b>	
Customer Trouble Report Rate is computed by accumulating the number of maintenance initial and repeated trouble reports during the reporting period. The resulting number of trouble reports are divided by the total "number of service" lines, ports or combination of existing for the CLEC's and BST respectively at the end of the report month.	
<b>Calculation:</b>	
Customer Trouble Report Rate = (Count of Initial and Repeated Trouble Reports in the Current Period) / (Number of Service Access Lines in service at End of the Report Period) X 100	
<b>Report Structure:</b>	
<ul style="list-style-type: none"> <li>• CLEC Specific</li> <li>• CLEC Aggregate</li> <li>• BST Aggregate</li> </ul>	
<b>Level of Disaggregation:</b>	
<p><b>ISDN Troubles included in Non Design – GA Only</b></p> <ul style="list-style-type: none"> <li>• Product Reporting Levels <ul style="list-style-type: none"> <li>➢ POTS Residence and Business</li> <li>➢ Design</li> <li>➢ PBX, CENTREX, and ISDN</li> <li>➢ UNE 2 Wire Loop (Design and Non – Design)</li> <li>➢ UNE Loop Other (Design and Non – Design)</li> <li>➢ UNE Other (Design and Non – Design)</li> <li>➢ Switching , Local Transport, and Combos (under development)</li> <li>➢ Local Interconnection Trunks</li> </ul> </li> <li>• Dispatch/No Dispatch categories applicable to all product levels</li> <li>• Geographic Scope <ul style="list-style-type: none"> <li>➢ State, Region and further geographic disaggregation as required by State Commission Order (e.g. Metropolitan Service Area - MSA)</li> </ul> </li> </ul>	
<b>Data Retained Relating to CLEC Experience</b>	<b>Data Retained Relating to BST Experience</b>
<ul style="list-style-type: none"> <li>• Report Month</li> <li>• CLEC Company Name</li> <li>• Ticket Submission Date &amp; Time (TICKET_ID)</li> <li>• Ticket Completion Date (CMPLTN_DT)</li> <li>• Service Type (CLASS_SVC_DESC)</li> <li>• Disposition and Cause (CAUSE_CD &amp; CAUSE_DESC)</li> <li>• # Service Access Lines in Service at the end of period</li> <li>• Geographic Scope</li> </ul>	<ul style="list-style-type: none"> <li>• Report Month</li> <li>• BST Company Code</li> <li>• Ticket Submission Date &amp; Time</li> <li>• Ticket Completion Date</li> <li>• Service Type</li> <li>• Disposition and Cause (Non-Design / Non-Special Only)</li> <li>• Trouble Code (Design and Trunking Services)</li> <li>• # Service Access Lines in Service at the end of period</li> <li>• Geographic Scope</li> </ul>
<p><b>NOTE:</b> Code in parentheses is the corresponding header found in the raw data file.</p>	

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**MAINTENANCE & REPAIR – (Customer Trouble Report Rate – Continued)**

**Retail Analog/Benchmark:**

CLEC Residence-Resale / BST Residence -Retail  
CLEC Business-Resale / BST Business-Retail  
CLEC Design-Resale / BST Design-Retail  
CLEC PBX, Centrex and ISDN Resale/ BST PBX, Centrex, and ISDN Retail  
CLEC Trunking-Resale / BST Trunking-Retail  
UNEs - Retail Analog (under development at this time)

Revision date: 06/09/99 (see)

**MAINTENANCE & REPAIR**

<b>Report/Measurement:</b>
Maintenance Average Duration
<b>Definition:</b>
The Average duration of Customer Trouble Reports from the receipt of the Customer Trouble Report to the time the trouble report is cleared.
<b>Exclusions:</b>
<ul style="list-style-type: none"> <li>• Trouble reports canceled at the CLEC request</li> <li>• BST trouble reports associated with administrative service</li> <li>• Customer Provided Equipment (CPE) troubles or CLEC Equipment Troubles.</li> <li>• Trouble reports greater than 10 days</li> </ul>
<b>Business Rules:</b>
For Average Duration the clock starts on the date and time of the receipt of a correct repair request. The clock stops on the date and time the service is restored (when the technician completes the trouble ticket on his/her CAT or work system).
<b>Calculation:</b>
Maintenance Average Duration = $\Sigma(\text{Date and Time of Service Restoration}) - (\text{Date and Time Trouble Ticket was Opened}) / \Sigma(\text{Total Closed Troubles in the reporting period})$
<b>Report Structure:</b>
<ul style="list-style-type: none"> <li>• CLEC Specific</li> <li>• BST Aggregate</li> <li>• CLEC Aggregate</li> </ul>
<b>Level of Disaggregation:</b>
<p><b>ISDN Troubles included in Non Design – GA Only</b></p> <ul style="list-style-type: none"> <li>• Product Reporting Levels <ul style="list-style-type: none"> <li>➢ POTS– Residence and Business</li> <li>➢ Design</li> <li>➢ PBX, CENTREX, and ISDN</li> <li>➢ UNE 2 Wire Loop (Design Non – Design)</li> <li>➢ UNE Loop Other (Design Non – Design)</li> <li>➢ UNE Other (Design Non – Design)</li> <li>➢ Switching, Local Transport and Combos (under development)</li> <li>➢ Local Interconnection Trunks</li> </ul> </li> <li>• Dispatch/No Dispatch categories applicable to all product levels</li> <li>• Geographic Scope <ul style="list-style-type: none"> <li>➢ State, Region and further geographic disaggregation as required by State Commission Order (e.g. Metropolitan Service Area – MSA)</li> </ul> </li> </ul>

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**MAINTENANCE & REPAIR – (Maintenance Average Duration – Continued)**

Data Retained Relating to CLEC Experience	Data Retained Relating to BST Experience
<ul style="list-style-type: none"> <li>• Report Month</li> <li>• Total Tickets (LINE_NBR)</li> <li>• CLEC Company Name</li> <li>• Ticket Submission Date &amp; Time (TIME_ID)</li> <li>• Ticket Completion Date (CMPLTN_DT)</li> <li>• Service Type (CLASS_SVC_DESC)</li> <li>• Disposition and Cause (CAUSE_CD &amp; CAUSE_DESC)</li> <li>• Geographic Scope</li> </ul> <p>NOTE: Code in parentheses is the corresponding header found in the raw data file.</p>	<ul style="list-style-type: none"> <li>• Report Month</li> <li>• Total Tickets</li> <li>• BST Company Code</li> <li>• Ticket Submission Date</li> <li>• Ticket submission Time</li> <li>• Ticket completion Date</li> <li>• Ticket Completion Time</li> <li>• Total Duration Time</li> <li>• Service Type</li> <li>• Disposition and Cause (Non – Design / Non-Special Only)</li> <li>• Trouble Code (Design and Trunking Services)</li> <li>• Geographic Scope</li> </ul>
<b>Retail Analog/Benchmark:</b>	
CLEC Residence-Resale / BST Residence-Resale CLEC Business-Resale / BST Business-Retail CLEC Design-Resale / BST Design-Retail CLEC PBX, Centrex and ISDN Resale / BST PBX, Centrex and ISDN Retail CLEC Trunking-Resale /BST Trunking-Retail UNEs - Retail Analog (under development at this time)	

Revision date: 06/09/99 (see)

**MAINTENANCE & REPAIR**

<b>Report/Measurement:</b>	
Percent Repeat Troubles within 30 Days	
<b>Definition:</b>	
Trouble reports on the same line/circuit as a previous trouble report received within 30 calendar days as a percent of total troubles reported.	
<b>Exclusions:</b>	
<ul style="list-style-type: none"> <li>• Trouble Reports canceled at the CLEC request</li> <li>• BST Trouble Reports associated with administrative service</li> <li>• Customer Provided Equipment (CPE) Troubles or CLEC Equipment Troubles.</li> </ul>	
<b>Business Rules:</b>	
Includes Customer trouble reports received within 30 days of an original Customer trouble report.	
<b>Calculation:</b>	
Percentage of Missed Repair Appointments = (Count of Customer Troubles where more than one trouble report was logged for the same service line within a continuous 30 days) / ( Total Trouble Reports Closed in Reporting Period) X 100	
<b>Report Structure:</b>	
<ul style="list-style-type: none"> <li>• CLEC Specific</li> <li>• CLEC Aggregate</li> <li>• BST Aggregate</li> </ul>	
<b>Level of Disaggregation:</b>	
<p><b>ISDN Troubles included in Non Design – GA Only</b></p> <ul style="list-style-type: none"> <li>• Product Reporting Levels           <ul style="list-style-type: none"> <li>➢ POTS Residence and Business</li> <li>➢ Design</li> <li>➢ PBX, CENTREX and ISDN</li> <li>➢ UNE 2 Wire Loop (Design and Non – Design)</li> <li>➢ UNE Loop Other (Design and Non – Design)</li> <li>➢ UNE Other (Design Non – Design)</li> <li>➢ Switching, Local Transport and Combos (under development)</li> <li>➢ Local Interconnection Trunks</li> </ul> </li> <li>• Dispatch/No Dispatch categories applicable to all product levels</li> <li>• Geographic Scope           <ul style="list-style-type: none"> <li>➢ State, Region and further geographic disaggregation as required by State Commission Order (e.g. Metropolitan Service Area - MSA)</li> </ul> </li> </ul>	
<b>Data Retained Relating to CLEC Experience</b>	<b>Data Retained Relating to BST Experience</b>
<ul style="list-style-type: none"> <li>• Report Month</li> <li>• Total Tickets (LINE_NBR)</li> <li>• CLEC Company Name</li> <li>• Ticket Submission Date &amp; Time (TICKET_ID)</li> <li>• Ticket Completion Date (CMPLTN_DT)</li> <li>• Total and Percent Repeat Trouble Reports within 30 Days (TOT_REPEAT)</li> <li>• Service Type</li> <li>• Disposition and Cause (CAUSE_CD &amp; CAUSE_DESC)</li> <li>• Geographic Scope</li> </ul>	<ul style="list-style-type: none"> <li>• Report Month</li> <li>• Total Tickets</li> <li>• BST Company Code</li> <li>• Ticket Submission Date</li> <li>• Ticket Submission Time</li> <li>• Ticket Completion Date</li> <li>• Ticket Completion Time</li> <li>• Total and Percent Repeat Trouble Reports within 30 Days</li> <li>• Service Type</li> <li>• Disposition and Cause (Non – Design/ Non-Special only)</li> <li>• Trouble Code (Design and Trunking Services)</li> <li>• Geographic Scope</li> </ul>
<p><b>NOTE:</b> Code parentheses is the corresponding header format found in the raw data file.</p>	

**MAINTENANCE & REPAIR – (Percent Repeat Troubles within 30 Days - Continued)**

**Retail Analog/Benchmark:**

CLEC Residence-Resale / BST Residence-Retail  
CLEC Business- Resale / BST Business-Retail  
CLEC Design-Resale / BST Design-Retail  
CLEC PBX, Centrex and ISDN Resale / BST PBX, Centrex and ISDN Retail  
CLEC Trunking-Resale / BST Trunking-Retail  
UNEs - Retail Analog (under development at this time)

Revision date: 06/09/99 (see)

**MANTENANCE & REPAIR**

<b>Report/Measurement:</b>	
Out of Service (OOS) > 24 Hours	
<b>Definition:</b>	
For Out of Service Troubles (no dial tone, cannot be called or cannot call out) the percentage of troubles cleared in excess of 24 hours. (All design services are considered to be out of service).	
<b>Exclusions:</b>	
<ul style="list-style-type: none"> <li>• Trouble Reports canceled at the CLEC request</li> <li>• BST Trouble Reports associated with administrative service</li> <li>• Customer Provided Equipment (CPE) Troubles or CLEC Equipment Troubles.</li> </ul>	
<b>Business Rules:</b>	
Customer Trouble reports that are out of service and cleared in excess of 24 hours. The clock begins when the trouble report is created in LMOS and the trouble is counted if the time exceeds 24 hours.	
<b>Calculation:</b>	
Out of Service (OOS) > 24 hours = ( Total Troubles OOS > 24 Hours) / Total OOS Troubles in Reporting Period) X 100	
<b>Report Structure:</b>	
<ul style="list-style-type: none"> <li>• CLEC Specific</li> <li>• BST Aggregate</li> <li>• CLEC Aggregate</li> </ul>	
<b>Level of Disaggregation:</b>	
<p><b>ISDN Troubles included in Non Design – GA Only</b></p> <ul style="list-style-type: none"> <li>• Product Reporting Levels <ul style="list-style-type: none"> <li>➢ POTS Residence and Business</li> <li>➢ Design</li> <li>➢ PBX and CENTREX and ISDN</li> <li>➢ UNE 2 Wire Loop (Design and Non – Design)</li> <li>➢ UNE Loop Other (Design and Non – Design)</li> <li>➢ UNE Other (Design and Non – Design)</li> <li>➢ Switching, Local Transport and Combos (under development)</li> <li>➢ Local Interconnection Trunks</li> </ul> </li> <li>• Dispatch/No Dispatch categories applicable to all product levels</li> <li>• Geographic Scope <ul style="list-style-type: none"> <li>➢ State, Region and further geographic disaggregation as required by State Commission Order (e.g. Metropolitan Service Area - MSA)</li> </ul> </li> </ul>	
<b>Data Retained Relating to CLEC Experience</b>	<b>Data Retained Relating to BST Experience</b>
<ul style="list-style-type: none"> <li>• Report Month</li> <li>• Total Tickets</li> <li>• CLEC Company Name</li> <li>• Ticket Submission Date &amp; Time (TICKET_ID)</li> <li>• Ticket Completion Date (CMPLTN_DT)</li> <li>• Percentage of Customer Troubles out of Service &gt; 24 Hours (OOS&gt;24_FLAG)</li> <li>• Service type (CLASS_SVC_DESC)</li> <li>• Disposition and Cause (CAUSE_CD &amp; CAUSE-DESC)</li> <li>• Geographic Scope</li> </ul>	<ul style="list-style-type: none"> <li>• Report Month</li> <li>• Total Tickets</li> <li>• BST Company Code</li> <li>• Ticket Submission Date</li> <li>• Ticket Submission time</li> <li>• Ticket Completion Date</li> <li>• Ticket Completion Time</li> <li>• Percent of Customer Troubles out of Service &gt; 24 Hours</li> <li>• Service type</li> <li>• Disposition and Cause (Non – Design/ Non-Special only)</li> <li>• Trouble Code (Design and Trunking Services)</li> <li>• Geographic Scope</li> </ul>
<p><b>NOTE:</b> Code in parentheses is the corresponding header found in the raw data file.</p>	

BellSouth  
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**MANTENANCE & REPAIR – (Out of Service (OOS) > 24 Hours – Continued)**

**Retail Analog/Benchmark:**

CLEC Residence-Resale / BST Residence- Retail  
CLEC Business- Resale / BST Business-Retail  
CLEC Design-Resale / BST Design-Retail  
CLEC PBX, Centrex and ISDN Resale / BST PBX, Centrex and ISDN Retail  
CLEC Trunking-Resale /BST Trunking- Retail  
UNEs Retail Analog (under development at this time.)

Revision date: 06/09/99 (see)

**MAINTENANCE & REPAIR**

<b>Report/Measurement:</b>	
OSS Interface Availability	
<b>Definition:</b>	
The percentage of time the OSS Interface is functionally available compared to scheduled availability. Availability percentage for the CLEC and BST interface systems and for the legacy systems accessed by them are captured.	
<b>Exclusions:</b>	
None	
<b>Business Rules:</b>	
This measure is designed to compare the OSS availability versus scheduled availability of BST's legacy systems.	
<b>Calculation:</b>	
OSS Interface Availability = (Actual System Functional Availability) / (Actual planned System Availability) X 100	
<b>Report Structure:</b>	
<ul style="list-style-type: none"> <li>• CLEC Aggregate</li> <li>• BST Aggregate</li> <li>• BST/CLEC</li> </ul>	
<b>Level of Disaggregation:</b>	
<ul style="list-style-type: none"> <li>• Region</li> </ul>	
<b>Data Retained Relating to CLEC Experience</b>	<b>Data Retained Relating to BST Experience</b>
<ul style="list-style-type: none"> <li>• Availability of CLEC TAFI</li> <li>• Availability of LMOS HOST, MARCH and SOCS</li> <li>• CRIS, PREDICTOR, LNP, and OSPCM (under development at this time)</li> </ul>	<ul style="list-style-type: none"> <li>• Availability of BST TAFI</li> <li>• Availability of LMOS HOST, MARCH and SOCS</li> </ul>
<b>Retail Analog/Benchmark:</b>	
Parity by design; Retail Analog	

Revision date: 06/09/99 (see)

**MAINTENANCE & REPAIR**

<b>Report/Measurement:</b>	
OSS Response Interval and Percentages	
<b>Definition:</b>	
The response intervals are determined by subtracting the time a request is received on the BST side of the interface until the response is received from the legacy system. Percentages of requests falling into each interval category are reported, along with the actual number of requests falling into those categories.	
<b>Exclusions:</b>	
Queries received during scheduled system maintenance time.	
<b>Business Rules:</b>	
This measure is designed to monitor the time required for the CLEC and BST interface system to obtain from BST's legacy systems the information required to handle maintenance and repair functions. The clock starts on the date and time when the request is received and the clock stops when the response has been transmitted through that same point to the requester.	
<b>Calculation:</b>	
OSS Response Interval = (Query Response Date and Time for Category "X") - (Query Request Date and Time for Category "X") / (Number of Queries Submitted in the Reporting Period) where, "X" is 0-4, ≥ 4 to 10, > 10, > 30 seconds.	
<b>Report Structure:</b>	
<ul style="list-style-type: none"> <li>• CLEC</li> <li>• BST Residence</li> <li>• BST Business (BST Total is under development at this time) by interface for each legacy system and function as appropriate.</li> </ul>	
<b>Level of Disaggregation:</b>	
Region	
<b>Data Retained Relating to CLEC Experience</b>	<b>Data Retained Relating to BST Experience</b>
<ul style="list-style-type: none"> <li>• CLEC Transaction Intervals</li> </ul>	<ul style="list-style-type: none"> <li>• BST Business and Residence transaction Intervals</li> </ul>
<b>Retail Analog/Benchmark:</b>	
Retail Analog	
Audit Verification	

Revision date: 06/09/99 (see)

**MAINTENANCE & REPAIR**

<b>Report/Measurement:</b>	
Average Answer Time – Repair Centers	
<b>Definition:</b>	
This measure demonstrates an average response time for the CLEC representative to contact a BST representative. The average time a CLEC Rep is in queue waiting for the LCSC or UNE Center Rep to answer.	
<b>Exclusions:</b>	
None	
<b>Business Rules:</b>	
This measure is designed to measure the time required for CLEC & BST from the time of the ACD choice to the time of being answered. The clock starts when the CLEC Rep makes a choice to be put in queue for the next repair attendant and the clock stops when the repair attendant answers the call.	
<b>Level of Disaggregation:</b>	
<ul style="list-style-type: none"> <li>• Region. CLEC/BST Service Centers and BST Repair Centers are regional.</li> </ul>	
<b>Calculation:</b>	
Average Answer Time for BST's Repair Centers = (Time BST Repair Attendant Answers Call) – (Time of entry into queue until ACD Selection) / (Total number of calls by reporting period)	
<b>Report Structure:</b>	
<ul style="list-style-type: none"> <li>• CLEC Aggregate</li> <li>• BST Aggregate</li> <li>• CLEC Aggregate</li> </ul>	
<b>Data Retained Relating to CLEC Experience</b>	<b>Data Retained Relating to BST Experience</b>
<ul style="list-style-type: none"> <li>• CLEC Average Answer Time</li> </ul>	<ul style="list-style-type: none"> <li>• BST Average Answer Time</li> </ul>
<b>Retail Analog/Benchmark:</b>	
Retail Analog	
Audit Verification	

Revision date: 06/09/99 (see)

**BILLING**

<b>Report/Measurement:</b>	
Invoice Accuracy	
<b>Definition:</b>	
This measure provides the percentage of accuracy of the billing invoices rendered to CLECs during the current month.	
<b>Exclusions:</b>	
<ul style="list-style-type: none"> <li>• Adjustments not related to billing errors (e.g., credits for service outage, special promotion credits, adjustments to satisfy the customer)</li> </ul>	
<b>Business Rules:</b>	
The accuracy of billing invoices delivered by BST to the CLEC must enable them to provide a degree of billing accuracy comparative to BST bills rendered to retail customers BST. CLECs request adjustments on bills determined to be incorrect. The BellSouth Billing verification process includes manually analyzing a sample of local bills from each bill period. The bill verification process draws from a mix of different customer billing options and types of service. An end-to-end auditing process is performed for new products and services. Internal measurements and controls are maintained on all billing processes.	
<b>Calculation:</b>	
$\text{Invoice Accuracy} = \frac{(\text{Total Billed Revenues during current month}) - (\text{Billing Related Adjustments during current month})}{\text{Total Billed Revenues during current month}} \times 100$	
<b>Report Structure:</b>	
<ul style="list-style-type: none"> <li>• CLEC Specific</li> <li>• CLEC Aggregate</li> <li>• BST Aggregate</li> </ul>	
<b>Level of Disaggregation :</b>	
<ul style="list-style-type: none"> <li>• Product / Invoice Type           <ul style="list-style-type: none"> <li>&gt; Resale</li> <li>&gt; UNE</li> <li>&gt; Interconnection</li> </ul> </li> <li>• Geographic Scope           <ul style="list-style-type: none"> <li>&gt; Region</li> </ul> </li> </ul>	
<b>Data Retained Relating to CLEC Experience:</b>	<b>Data Retained Relating to BST Performance:</b>
<ul style="list-style-type: none"> <li>• Report Month</li> <li>• Invoice Type</li> <li>• Total Billed Revenue</li> <li>• Billing Related Adjustments</li> </ul>	<ul style="list-style-type: none"> <li>• Report Month</li> <li>• Retail Type           <ul style="list-style-type: none"> <li>&gt; CRIS</li> <li>&gt; CABS</li> </ul> </li> <li>• Total Billed Revenue</li> <li>• Billing Related Adjustments</li> </ul>
<b>Retail Analog/Benchmark</b>	
CLEC Invoice Accuracy is comparable to BST Invoice Accuracy	

Revision date: 09/15/99 (lg)

**BILLING**

<b>Report/Measurement:</b>	
Mean Time to Deliver Invoices	
<b>Definition:</b>	
This measure provides the mean interval for billing invoices	
<b>Exclusions:</b>	
Any invoices rejected due to formatting or content errors.	
<b>Business Rules:</b>	
Measures the mean interval for timeliness of billing records delivered to CLECs in an agreed upon format. CRIS-based invoices are measured in business days, and CABS-based invoices in calendar days.	
<b>Calculation:</b>	
$\text{Mean Time To Deliver Invoices} = \frac{\sum [(\text{Invoice Transmission Date}) - (\text{Close Date of Scheduled Bill Cycle})]}{(\text{Count of Invoices Transmitted in Reporting Period})}$	
<b>Report Structure:</b>	
<ul style="list-style-type: none"> <li>• CLEC Specific</li> <li>• CLEC Aggregate</li> <li>• BST Aggregate</li> </ul>	
<b>Level of Disaggregation:</b>	
<ul style="list-style-type: none"> <li>• Product / Invoice Type <ul style="list-style-type: none"> <li>➢ Resale</li> <li>➢ UNE</li> <li>➢ Interconnection</li> </ul> </li> <li>• Geographic Scope <ul style="list-style-type: none"> <li>➢ Region</li> </ul> </li> </ul>	
<b>Data Retained Relating to CLEC Experience:</b>	<b>Data Retained Relating to BST Performance:</b>
<ul style="list-style-type: none"> <li>• Report Month</li> <li>• Invoice Type</li> <li>• Invoice Transmission Count</li> <li>• Date of Scheduled Bill Close</li> </ul>	<ul style="list-style-type: none"> <li>• Report Month</li> <li>• Retail Type <ul style="list-style-type: none"> <li>➢ CRIS</li> <li>➢ CABS</li> </ul> </li> <li>• Invoice Transmission Count</li> <li>• Date of Scheduled Bill Close</li> </ul>
<b>Retail Analog/Benchmark:</b>	
<ul style="list-style-type: none"> <li>• CRIS-based invoices will be released for delivery within six (6) business days</li> <li>• CABS-based invoices will be released for delivery within eight (8) calendar days.</li> <li>• CLEC Average Delivery Intervals for both CRIS and CABS Invoices are comparable to BST Average delivery time for both systems.</li> </ul>	

Revision date: 09/15/99 (lg)

BellSouth  
Service Quality Measurements  
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**BILLING**

<b>Report/Measurement:</b>	
Usage Data Delivery Accuracy	
<b>Definition:</b>	
This measurement captures the percentage of recorded usage that is delivered error free and in an acceptable format to the appropriate Competitive Local Exchange Carrier (CLEC). These percentages will provide the necessary data for use as a comparative measurement for BellSouth performance. This measurement captures Data Delivery Accuracy rather than the accuracy of the individual usage recording.	
<b>Exclusions:</b>	
None	
<b>Business Rules:</b>	
The accuracy of the data delivery of usage records delivered by BST to the CLEC must enable them to provide a degree of accuracy comparative to BST bills rendered to their retail customers. If errors are detected in the delivery process, they are investigated, evaluated and documented. Errors are corrected and the data retransmitted to the CLEC.	
<b>Calculations:</b>	
Usage Data Delivery Accuracy = $\Sigma [(Total\ number\ of\ usage\ data\ packs\ sent\ during\ current\ month) - (Total\ number\ of\ usage\ data\ packs\ requiring\ retransmission\ during\ current\ month)] / (Total\ number\ of\ usage\ data\ packs\ sent\ during\ current\ month) \times 100$	
<b>Report Structure:</b>	
<ul style="list-style-type: none"> <li>• CLEC Specific</li> <li>• CLEC Aggregate</li> <li>• BST Aggregate</li> </ul>	
<b>Level of Disaggregation:</b>	
<ul style="list-style-type: none"> <li>• Geographic Scope <ul style="list-style-type: none"> <li>&gt; Region</li> </ul> </li> </ul>	
<b>Data Retained Relating to CLEC Experience:</b>	<b>Data Retained Relating to BST Performance:</b>
<ul style="list-style-type: none"> <li>• Report Month</li> <li>• Record Type <ul style="list-style-type: none"> <li>&gt; BellSouth Recorded</li> <li>&gt; Non BellSouth Recorded</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Report Month</li> <li>• Record Type</li> </ul>
<b>Retail Analog/Benchmark:</b>	
CLEC Usage Data Delivery Accuracy is comparable to BST Usage Data Delivery Accuracy	

Revision date: 09/15/99 (lg)

BellSouth  
Service Quality Measurements  
Regional Performance Reports

**BILLING**

<b>Report/Measurement:</b>	
Usage Data Delivery Completeness	
<b>Definition:</b>	
This measurement provides percentage of complete and accurately recorded usage data (usage recorded by BellSouth and usage recorded by other companies and sent to BST for billing) that is processed and transmitted to the CLEC within thirty (30) days of the message recording date. A parity measure is also provided showing completeness of BST messages processed and transmitted via CMDS. BellSouth delivers its own retail usage from recording location to billing location via CMDS as well as delivering billing data to other companies. Timeliness, Completeness and Mean Time to Deliver Usage measures are reported on the same report.	
<b>Exclusions:</b>	
None	
<b>Business Rules:</b>	
The purpose of these measurements is to demonstrate the level of quality of usage data delivered to the appropriate CLEC. Method of delivery is at the option of the CLEC.	
<b>Calculation:</b>	
Usage Data Delivery Completeness = $\Sigma(\text{Total number of Recorded usage records delivered during the current month that are within thirty (30) days of the message recording date}) / \Sigma(\text{Total number of Recorded usage records delivered during the current month}) \times 100$	
<b>Report Structure</b>	
<ul style="list-style-type: none"> <li>• CLEC Specific</li> <li>• CLEC Aggregate</li> <li>• BST Aggregate</li> </ul>	
<b>Level of Disaggregation:</b>	
<ul style="list-style-type: none"> <li>• Geographic Scope <ul style="list-style-type: none"> <li>➢ Region</li> </ul> </li> </ul>	
<b>Data Retained Relating to CLEC Experience:</b>	<b>Data Retained Relating to BST Performance:</b>
<ul style="list-style-type: none"> <li>• Report Month</li> <li>• Record Type <ul style="list-style-type: none"> <li>➢ BellSouth Recorded</li> <li>➢ Non BellSouth Recorded</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Report Monthly</li> <li>• Record Type</li> </ul>
<b>Retail Analog/Benchmark:</b>	
CLEC Usage Delivery Completeness is comparable to BST Usage Delivery Completeness	

Revision date: 09/15/99 (lg)

**BILLING**

<b>Report/Measurement:</b>	
Usage Data Delivery Timeliness	
<b>Definition:</b>	
This measurement provides a percentage of recorded usage data (usage recorded by BST and usage recorded by other companies and sent to BST for billing) that is delivered to the appropriate CLEC within six (6) calendar days from the receipt of the initial recording. A parity measure is also provided showing timeliness of BST messages processed and transmitted via CMDS. Timeliness, Completeness and Mean Time to Deliver Usage measures are reported on the same report.	
<b>Exclusions:</b>	
None	
<b>Business Rules:</b>	
The purpose of this measurement is to demonstrate the level of timeliness for processing and transmission of usage data delivered to the appropriate CLEC. The usage data will be mechanically transmitted or mailed to the CLEC data processing center once daily. The Timeliness interval of usage recorded by other companies is measured from the date BST receives the records to the date BST distributes to the CLEC. Method of delivery is at the option of the CLEC.	
<b>Calculation:</b>	
Usage Data Delivery Timeliness = $\Sigma$ (Total number of usage records sent within six (6) calendar days from initial recording/receipt) / $\Sigma$ (Total number of usage records sent) X 100	
<b>Report Structure:</b>	
<ul style="list-style-type: none"> <li>• CLEC Aggregate</li> <li>• CLEC Specific</li> <li>• BST Aggregate</li> </ul>	
<b>Level of Disaggregation:</b>	
<ul style="list-style-type: none"> <li>• Geographic Scope <ul style="list-style-type: none"> <li>➢ Region</li> </ul> </li> </ul>	
<b>Data Retained Relating to CLEC Experience:</b>	<b>Data Retained Relating to BST Performance:</b>
<ul style="list-style-type: none"> <li>• Report Month</li> <li>• Record Type <ul style="list-style-type: none"> <li>➢ BellSouth Recorded</li> <li>➢ Non-BellSouth Recorded</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Report Monthly</li> <li>• Record Type</li> </ul>
<b>Retail Analog/Benchmark:</b>	
CLEC Usage Data Delivery Timeliness is comparable to BST Usage Data Delivery Timeliness	

Revision date: 09/15/99 (lg)

BellSouth  
Service Quality Measurements  
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**BILLING**

<b>Report/Measurement:</b>	
Mean Time to Deliver Usage	
<b>Definition:</b>	
This measurement provides the average time it takes to deliver Usage Records to a CLEC. A parity measure is also provided showing timeliness of BST messages processed and transmitted via CMDS. Timeliness, Completeness and Mean Time to Deliver Usage measures are reported on the same report.	
<b>Exclusions:</b>	
None	
<b>Business Rules:</b>	
The purpose of this measurement is to demonstrate the average number of days it takes BST to deliver Usage data to the appropriate CLEC. Usage data is mechanically transmitted or mailed to the CLEC data processing center once daily. Method of delivery is at the option of the CLEC.	
<b>Calculation:</b>	
Mean Time to Deliver Usage = $\Sigma$ (Record volume X estimated number of days to deliver the Usage Record) / total record volume	
<b>Report Structure:</b>	
<ul style="list-style-type: none"> <li>• CLEC Aggregate</li> <li>• CLEC Specific</li> <li>• BST Aggregate</li> </ul>	
<b>Level of Disaggregation:</b>	
<ul style="list-style-type: none"> <li>• Geographic Scope <ul style="list-style-type: none"> <li>➢ Region</li> </ul> </li> </ul>	
<b>Data Retained Relating to CLEC Experience:</b>	<b>Data Retained Relating to BST Performance:</b>
<ul style="list-style-type: none"> <li>• Report Month</li> <li>• Record Type <ul style="list-style-type: none"> <li>➢ BellSouth Recorded</li> <li>➢ Non-BellSouth Recorded</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Report Monthly</li> <li>• Record Type</li> </ul>
<b>Retail Analog/Benchmark:</b>	
Mean Time to Deliver Usage to CLEC is comparable to Mean Time to Deliver Usage to BST	

Revision date: 09/15/99 (lg)

**OPERATOR SERVICES AND DIRECTORY ASSISTANCE**

<b>Report/Measurement:</b>
Speed to Answer Performance/Average Speed to Answer – Toll
<b>Definition:</b>
Measurement of the average time in seconds calls wait before answered by a toll operator.
<b>Exclusions:</b>
Calls abandoned by customers are not reflected in the average speed to answer but are reflected in the conversion tables where the percent answered within "X" seconds is determined.
<b>Business Rules:</b>
The call waiting measurement scan starts when the customer enters the queue and ends when a BST representative answers the call. The average speed to answer is determined by measuring and accumulating the seconds of wait time from the entry of a customer into the BST call management system queue until the customer is transferred to a BST representative. No distinction is made between CLEC customers and BST customers.
<b>Calculation:</b>
The Average Speed to Answer for toll is calculated by using data from monthly system measurement reports taken from the centralized call routing switches. The "total call waiting seconds" is a sub-component of this measure which BST systems calculate by monitoring the number of calls in queue throughout the day multiplied by the time (in seconds) between monitoring events. The "total calls served" is the other sub-component of this measure, which BST systems record as the total number of calls handled by Operator Services toll centers. Since calls abandoned are not reflected in the calculation, the percent answered within the required timeframe is determined by using conversion tables with input for the abandonment rate.
<b>Report Structure:</b>
Reported for the aggregate of BST and CLECs.
<ul style="list-style-type: none"> <li>• State</li> </ul>
<b>Level of Disaggregation:</b>
None
<b>Data Retained (on Aggregate Basis)</b>
For the items below, BST's Performance Measurement Analysis Platform (PMAP) receives a final computation; therefore, no raw data file is available in PMAP.
<ul style="list-style-type: none"> <li>• Month</li> <li>• Call Type (Toll)</li> <li>• Average Speed of Answer</li> </ul>
<b>Retail Analog/Benchmark</b>
Parity by Design

Revision Date: 06/29/99 (tg)

**OPERATOR SERVICES AND DIRECTORY ASSISTANCE**

<b>Report/Measurement:</b>
Speed to Answer Performance/Percent Answered within "X" Seconds – Toll
<b>Definition:</b>
Measurement of the percent of toll calls that are answered in less than "X" seconds. The number of seconds represented by "X" is thirty, except where a different regulatory benchmark has been set against the Average Speed to Answer by a State Commission.
<b>Exclusions:</b>
Calls abandoned by customers are not reflected in the average speed to answer but are reflected in the conversion tables where the percent answered within "X" seconds is determined.
<b>Business Rules:</b>
The call waiting measurement scan starts when the customer enters the queue and ends when a BST representative answers the call. The average speed to answer is determined by measuring and accumulating the seconds of wait time from the entry of a customer into the BST call management system queue until the customer is transferred to a BST representative. No distinction is made between CLEC customers and BST customers.
<b>Calculation:</b>
The Percent Answered within "X" Seconds measurement for toll is derived by using the BellCore Statistical Answer Conversion Tables, to convert the Average Speed to Answer measure into a percent of calls answered within "X" seconds. The BellCore Conversion Tables are specific to the defined parameters of work time, number of operators, max queue size and call abandonment rates.
<b>Report Structure:</b>
Reported for the aggregate of BST and CLECs
<ul style="list-style-type: none"> <li>• State</li> </ul>
<b>Level of Disaggregation:</b>
None
<b>Data Retained (on Aggregate Basis)</b>
For the items below, BST's Performance Measurement Analysis Platform (PMAP) receives a final computation; therefore, no raw data file is available in PMAP.
<ul style="list-style-type: none"> <li>• Month</li> <li>• Call Type (Toll)</li> <li>• Average Speed of Answer</li> </ul>
<b>Retail Analog/Benchmark</b>
Parity by Design

Revision Date: 06/29/99 (tg)

**OPERATOR SERVICES AND DIRECTORY ASSISTANCE**

<b>Report/Measurement:</b>
Speed to Answer Performance/Average Speed to Answer – Directory Assistance (DA)
<b>Definition:</b>
Measurement of the average time in seconds calls wait before answer by a DA operator.
<b>Exclusions:</b>
Calls abandoned by customers are not reflected in the average speed to answer but are reflected in the conversion tables where the percent answered within “X” seconds is determined.
<b>Business Rules:</b>
The call waiting measurement scan starts when the customer enters the queue and ends when a BST representative answers the call. The average speed to answer is determined by measuring and accumulating the seconds of wait time from the entry of a customer into the BST call management system queue until the customer is transferred to a BST representative. No distinction is made between CLEC customers and BST customers.
<b>Calculation:</b>
The Average Speed to Answer for DA is calculated by using data from monthly system measurement reports taken from the centralized call routing switches. The “total call waiting seconds” is a sub-component of this measure which BST systems calculate by monitoring the number of calls in queue throughout the day multiplied by the time (in seconds) between monitoring events. The “total calls served” is the other sub-component of this measure, which BST systems record as the total number of calls handled by Operator Services DA centers. Since calls abandoned are not reflected in the calculation, the percent answered within the required timeframe is determined by using conversion tables with input for the abandonment rate.
<b>Report Structure:</b>
Reported for the aggregate of BST and CLECs
<ul style="list-style-type: none"> <li>• State</li> </ul>
<b>Level of Disaggregation:</b>
None
<b>Data Retained (on Aggregate Basis)</b>
For the items below, BST’s Performance Measurement Analysis Platform (PMAP) receives a final computation; therefore, no raw data file is available in PMAP.
<ul style="list-style-type: none"> <li>• Month</li> <li>• Call Type (DA)</li> <li>• Average Speed of Answer</li> </ul>
<b>Retail Analog/Benchmark</b>
Parity by Design

Revision Date: 06/29/99 (tg)

**OPERATOR SERVICES AND DIRECTORY ASSISTANCE**

<b>Report/Measurement:</b>
Speed to Answer Performance/Percent Answered within "X" Seconds – Directory Assistance (DA)
<b>Definition:</b>
Measurement of the percent of DA calls that are answered in less than "X" seconds. The number of seconds represented by "X" is twenty, except where a different regulatory benchmark has been set against the Average Speed to Answer by a State Commission.
<b>Exclusions:</b>
Calls abandoned by customers are not reflected in the average speed to answer but are reflected in the conversion tables where the percent answered within "X" seconds is determined.
<b>Business Rules:</b>
The call waiting measurement scan starts when the customer enters the queue and ends when a BST representative answers the call. The average speed to answer is determined by measuring and accumulating the seconds of wait time from the entry of a customer into the BST call management system queue until the customer is transferred to a BST representative. No distinction is made between CLEC customers and BST customers.
<b>Calculation:</b>
The Percent Answered within "X" Seconds measurement for DA is derived by using the BellCore Statistical Answer Conversion Tables, to convert the Average Speed to Answer measure into a percent of calls answered within "X" seconds. The BellCore Conversion Tables are specific to the defined parameters of work time, number of operators, max queue size and call abandonment rates.
<b>Report Structure:</b>
Reported for the aggregate of BST and CLECs
<ul style="list-style-type: none"> <li>• State</li> </ul>
<b>Level of Disaggregation:</b>
None
<b>Data Retained (on Aggregate Basis)</b>
For the items below, BST's Performance Measurement Analysis Platform (PMAP) receives a final computation; therefore, no raw data file is available in PMAP.
<ul style="list-style-type: none"> <li>• Month</li> <li>• Call Type (DA)</li> <li>• Average Speed of Answer</li> </ul>
<b>Retail Analog/Benchmark</b>
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Revision Date: 06/29/99 (tg)

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**E911**

<b>Report/Measurement:</b>
E911/Timeliness
<b>Definition:</b>
Measures the percentage of batch orders for E911 database updates (to CLEC resale and BST retail records) processed successfully within a 24-hour period.
<b>Exclusions:</b>
<ul style="list-style-type: none"> <li>• Any resale order canceled by a CLEC</li> <li>• Facilities-based CLEC orders</li> </ul>
<b>Business Rules:</b>
The 24-hour processing period is calculated based on the date and time processing starts on the batch orders and the date and time processing stops on the batch orders. Mechanical processing starts when SCC (BST's E911 vendor) receives E911 files containing batch orders extracted from BST's Service Order Communication System (SOCS). Processing stops when SCC loads the individual records to the E911 database. No distinctions are made between CLEC resale records and BST retail records.
<b>Calculation:</b>
$E911 \text{ Timeliness} = \Sigma (\text{Number of batch orders processed within 24 hours} \div \text{Total number of batch orders submitted}) \times 100$
<b>Report Structure:</b>
Reported for the aggregate of CLEC resale updates and BST retail updates
<ul style="list-style-type: none"> <li>• State</li> <li>• Region</li> </ul>
<b>Levels of Disaggregation:</b>
None
<b>Data Retained</b>
<ul style="list-style-type: none"> <li>• Report month</li> <li>• Aggregate data</li> </ul>
<b>Retail Analog/Benchmark</b>
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**E911**

<b>Report/Measurement:</b>
E911/Accuracy
<b>Definition:</b>
Measures the individual E911 telephone number (TN) record updates (to CLEC resale and BST retail records) processed successfully for E911 with no errors.
<b>Exclusions:</b>
<ul style="list-style-type: none"> <li>• Any resale order canceled by a CLEC</li> <li>• Facilities-based CLEC orders</li> </ul>
<b>Business Rules:</b>
Accuracy is based on the number of records processed without error at the conclusion of the processing cycle. Mechanical processing starts when SCC (BST's E911 vendor) receives E911 files containing telephone number (TN) records extracted from BST's Service Order Communication System (SOCS). No distinctions are made between CLEC resale records and BST retail records.
<b>Calculation:</b>
$\text{E911 Accuracy} = \frac{\Sigma(\text{Number of record individual updates processed with no errors}}{\text{Total number of individual record updates}} \times 100$
<b>Report Structure:</b>
Reported for the aggregate of CLEC resale updates and BST retail updates <ul style="list-style-type: none"> <li>• State</li> <li>• Region</li> </ul>
<b>Level of Disaggregation:</b>
None
<b>Data Retained</b>
<ul style="list-style-type: none"> <li>• Report month</li> <li>• Aggregate data</li> </ul>
<b>Retail Analog/Benchmark</b>
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**E911**

<b>Report/Measurement:</b>
E911/Mean Interval
<b>Definition:</b>
Measures the mean interval processing of E911 batch orders (to update CLEC resale and BST retail records).
<b>Exclusions:</b>
<ul style="list-style-type: none"> <li>• Any resale order canceled by a CLEC</li> <li>• Facilities-based CLEC orders</li> </ul>
<b>Business Rules:</b>
The processing period is calculated based on the date and time processing starts on the batch orders and the date and time processing stops on the batch orders. Data is posted in 4-hour increments up to and beyond 24 hours. No distinctions are made between CLEC resale records and BST retail records.
<b>Calculation:</b>
$\text{E911 Mean Interval} = \frac{\sum (\text{Date and time of batch order completion} - \text{Date and time of batch order submission})}{\text{Number of batch orders completed}}$
<b>Report Structure:</b>
Reported for the aggregate of CLEC resale updates and BST retail updates
<ul style="list-style-type: none"> <li>• State</li> <li>• Region</li> </ul>
<b>Level of Disaggregation:</b>
None
<b>Data Retained (on Aggregate Basis)</b>
<ul style="list-style-type: none"> <li>• Report month</li> <li>• Aggregate data</li> </ul>
<b>Retail Analog/Benchmark</b>
Parity by Design

Revision Date: 06/29/99 (tg)

**TRUNK GROUP PERFORMANCE**

<b>Report/Measurement:</b>	
Trunk Group Service Report	
<b>Definition:</b>	
A report of the percent blocking above the Measured Blocking Threshold (MBT) on all final trunk groups between CLEC Points of Termination and BST end offices or tandems.	
<b>Exclusions:</b>	
<ul style="list-style-type: none"> <li>• Trunk groups for which valid traffic data is not available</li> <li>• High use trunk groups</li> </ul>	
<b>Business Rules:</b>	
Traffic trunking data measurements are validated and processed by the Total Network Data System/Trunking (TNDS/TK), a Telcordia (BellCore) supported application, on an hourly basis for Average Business Days (Monday through Friday). The traffic load sets, including offered load and observed blocking ratio (calls blocked divided by calls attempted), are averaged for a 20 day period, and the busy hour is selected. The busy hour average data for each trunk group is captured for reporting purposes. Although all trunk groups are available for reporting, the report highlight those trunk groups with blocking greater than the Measured Blocking Threshold (MBT) and the number of consecutive monthly reports that the trunk group blocking has exceeded the MBT. The MBT for CTTG is 2% and the MBT for all other trunk groups is 3%.	
<b>Calculation:</b>	
Measured blocking = (Total number of blocked calls) / (Total number of attempted calls) X 100	
<b>Report Structure:</b>	
<ul style="list-style-type: none"> <li>• BST Aggregate           <ul style="list-style-type: none"> <li>&gt; CTTG</li> <li>&gt; Local</li> </ul> </li> <li>• CLEC Aggregate           <ul style="list-style-type: none"> <li>&gt; BST Administered CLEC Trunk</li> <li>&gt; CLEC Administered CLEC Trunk</li> </ul> </li> <li>• CLEC Specific           <ul style="list-style-type: none"> <li>&gt; BST Administered CLEC Trunk</li> <li>&gt; CLEC Administered CLEC Trunk</li> </ul> </li> </ul>	
<b>Level of Disaggregation:</b>	
State	
<b>Data Retained Relating to CLEC Experience</b>	<b>Data Retained Relating to BST Experience</b>
<ul style="list-style-type: none"> <li>• Report month</li> <li>• Total trunk groups</li> <li>• Total trunk groups for which data is available</li> <li>• Trunk groups with blocking greater than the MBT</li> <li>• Percent of trunk groups with blocking greater than the MBT</li> </ul>	<ul style="list-style-type: none"> <li>• Report month</li> <li>• Total trunk groups</li> <li>• Total trunk groups for which data is available</li> <li>• Trunk groups with blocking greater than the MBT</li> <li>• Percent of trunk groups with blocking greater than the MBT</li> </ul>
<b>Retail Analog/Benchmark:</b>	
CLEC Trunk Blockage/BST Trunk Blockage	

Revision Date: 09/15/99 (tm)

**TRUNK GROUP PERFORMANCE**

<b>Report/Measurement:</b>	
Trunk Group Service Detail	
<b>Definition:</b>	
A detailed list of all final trunk groups between CLEC Points of Presence and BST end offices or tandems, and the actual blocking performance when the blocking exceeds the Measured Blocking Threshold (MBT) for the trunk groups.	
<b>Exclusions:</b>	
<ul style="list-style-type: none"> <li>• Trunk groups for which valid traffic data is not available</li> <li>• High use trunk groups</li> </ul>	
<b>Business Rules:</b>	
Traffic trunking data measurements are validated and processed by the Total Network Data System/Trunking (TNSD/TK), a Telcordia (Bellcore) supported application, on an hourly basis for Average Business Days (Monday through Friday). The traffic load sets, including offered load and observed blocking ratio (calls blocked divided by calls attempted), are averaged for a 20 day period, and the busy hour is selected. The busy hour average data for each trunk group is captured for reporting purposes. Although all trunk groups are available for reporting, the report highlight those trunk groups with blocking greater than the Measured Blocking Threshold (MBT) and the number of consecutive monthly reports that the trunk group blocking has exceeded the MBT. The MBT for CTTG is 2% and the MBT for all other trunk groups is 3%.	
<b>Calculation:</b>	
Measured Blocking = (Total number of blocked calls) / (Total number of attempted calls) X 100	
<b>Report Structure:</b>	
<ul style="list-style-type: none"> <li>• BST Specific <ul style="list-style-type: none"> <li>➢ Traffic Identity</li> <li>➢ TGSN</li> <li>➢ Tandem</li> <li>➢ End Office</li> <li>➢ Description</li> <li>➢ Observed Blocking</li> <li>➢ Busy Hour</li> <li>➢ Number Trunks</li> <li>➢ Valid study days</li> <li>➢ Number reports</li> <li>➢ Remarks</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• CLEC Specific <ul style="list-style-type: none"> <li>➢ Traffic Identity</li> <li>➢ TGSN</li> <li>➢ Tandem</li> <li>➢ CLEC POT</li> <li>➢ Description</li> <li>➢ Observed Blocking</li> <li>➢ Busy Hour</li> <li>➢ Number Trunks</li> <li>➢ Valid study days</li> <li>➢ Number reports</li> <li>➢ Remarks</li> </ul> </li> </ul>
<b>Level of Disaggregation:</b>	
State	
<b>Data Retained Relating to CLEC Experience</b>	<b>Data Retained Relating to BST Experience</b>
<ul style="list-style-type: none"> <li>• Report month</li> <li>• Total trunk groups</li> <li>• Total trunk groups for which data is available</li> <li>• Trunk groups with blocking greater than the MBT</li> <li>• Percent of trunk groups with blocking greater than the MBT</li> <li>• Traffic identity, TGSN, end points, description, busy hour, valid study days, number reports</li> </ul>	<ul style="list-style-type: none"> <li>• Report month</li> <li>• Total trunk groups</li> <li>• Total trunk groups for which data is available</li> <li>• Trunk groups with blocking greater than the MBT</li> <li>• Percent of trunk groups with blocking greater than the MBT</li> <li>• Traffic identity, TGSN, end points, description, busy hour, valid study days, number reports</li> </ul>
<b>Retail Analog/Benchmark:</b>	
CLEC Trunk Blockage/BST Trunk Blockage	

Revision Date: 09/15/99 (tm)

**COLLOCATION**

<b>Report/Measurement:</b>
Collocation/Average Response Time
<b>Definition:</b>
Measures the average time (counted in business days) from the receipt of a complete and accurate collocation application (including receipt of application fees) to the date BellSouth responds in writing.
<b>Exclusions:</b>
<ul style="list-style-type: none"> <li>• Requests to augment previously completed arrangements</li> <li>• Any application cancelled by the CLEC</li> </ul>
<b>Business Rules:</b>
The clock starts on the date that BST receives a complete and accurate collocation application accompanied by the appropriate application fee. The clock stops on the date that BST returns a response. The clock will restart upon receipt of changes to the original application request.
<b>Calculation:</b>
Average Response Time = $\Sigma(\text{Request Response Date}) - (\text{Request Submission Date}) / \text{Count of Responses Returned within Reporting Period}$ .
<b>Report Structure:</b>
<ul style="list-style-type: none"> <li>• Individual CLEC (alias) aggregate</li> <li>• Aggregate of all CLECs</li> </ul>
<b>Level of Disaggregation:</b>
<ul style="list-style-type: none"> <li>• State, Region and further geographic disaggregation as required by State Commission Order</li> <li>• Virtual</li> <li>• Physical</li> </ul>
<b>Data Retained:</b>
<ul style="list-style-type: none"> <li>• Report period</li> <li>• Aggregate data</li> </ul>
<b>Retail Analog/Benchmark:</b>
Under development

Revision Date: 06/29/99 (tg)

**COLLOCATION**

<b>Report/Measurement:</b>
Collocation/Average Arrangement Time
<b>Definition:</b>
Measures the average time (counted in business days) from the receipt of a complete and accurate Bona Fide firm order (including receipt of appropriate fee) to the date BST completes the collocation arrangement.
<b>Exclusions:</b>
<ul style="list-style-type: none"> <li>• Any Bona Fide firm order cancelled by the CLEC</li> <li>• Bona Fide firm orders to augment previously completed arrangements</li> <li>• Time for BST to obtain permits</li> <li>• Time during which the collocation contract is being negotiated</li> </ul>
<b>Business Rules:</b>
The clock starts on the date that BST receives a complete and accurate Bona Fide firm order accompanied by the appropriate fee. The clock stops upon submission of the permit request and restarts upon receipt of the approved permit. Changes (affecting the provisioning interval or capital expenditures) that are submitted while provisioning is in progress may alter the completion date. The clock stops on the date that BST completes the collocation arrangement.
<b>Calculation:</b>
Average Arrangement Time = $\Sigma(\text{Date Collocation Arrangement is Complete}) - (\text{Date Order for Collocation Arrangement Submitted}) / \text{Total Number of Collocation Arrangements Completed during Reporting Period.}$
<b>Report Structure:</b>
<ul style="list-style-type: none"> <li>• Individual CLEC (alias) aggregate</li> <li>• Aggregate of all CLECs</li> </ul>
<b>Level of Disaggregation:</b>
<ul style="list-style-type: none"> <li>• State, Region and further geographic disaggregation as required by State Commission Order</li> <li>• Virtual</li> <li>• Physical</li> </ul>
<b>Data Retained:</b>
<ul style="list-style-type: none"> <li>• Report period</li> <li>• Aggregate data</li> </ul>
<b>Retail Analog/Benchmark:</b>
Under development

Revision Date: 06/29/99 (tg)

**COLLOCATION**

<b>Report/Measurement:</b>
Collocation/Percent of Due Dates Missed
<b>Definition:</b>
Measures the percent of missed due dates for collocation arrangements.
<b>Exclusions:</b>
<ul style="list-style-type: none"> <li>• Any Bona Fide firm order cancelled by the CLEC</li> <li>• Bona Fide firm orders to augment previously completed arrangements</li> <li>• Time for BST to obtain permits</li> <li>• Time during which the collocation contract is being negotiated</li> </ul>
<b>Business Rules:</b>
The clock starts on the date that BST receives a complete and accurate Bona Fide firm order accompanied by the appropriate fee. The clock stops on the date that BST completes the collocation arrangement.
<b>Calculation:</b>
$\% \text{ of Due Dates Missed} = \Sigma (\text{Number of Orders not completed w/i ILEC Committed Due Date during Reporting Period}) / \text{Number of Orders Completed in Reporting Period}) \times 100$
<b>Report Structure:</b>
<ul style="list-style-type: none"> <li>• Individual CLEC (alias) aggregate</li> <li>• Aggregate of all CLECs</li> </ul>
<b>Level of Disaggregation:</b>
<ul style="list-style-type: none"> <li>• State, Region and further geographic disaggregation as required by State Commission Order</li> <li>• Virtual</li> <li>• Physical</li> </ul>
<b>Data Retained:</b>
<ul style="list-style-type: none"> <li>• Report period</li> <li>• Aggregate data</li> </ul>
<b>Retail Analog/Benchmark:</b>
Under development

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Appendix A: Reporting Scope\*

<p><b>Standard Service Groupings</b></p>	<p><u>Pre-Order, Ordering</u></p> <ul style="list-style-type: none"> <li>• Resale Residence</li> <li>• Resale Business</li> <li>• Resale Special</li> <li>• Local Interconnection Trunks</li> <li>• UNE</li> <li>• UNE - Loops w/LNP</li> </ul> <p><u>Provisioning</u></p> <ul style="list-style-type: none"> <li>• UNE Non-Design</li> <li>• UNE Design</li> <li>• UNE Loops w/LNP</li> <li>• Local Interconnection Trunks</li> <li>• Resale Residence</li> <li>• Resale Business</li> <li>• Resale Design</li> <li>• BST Trunks</li> <li>• BST Residence Retail</li> <li>• BST Business Retail</li> </ul> <p><u>Maintenance and Repair</u></p> <ul style="list-style-type: none"> <li>• Local Interconnection Trunks</li> <li>• UNE Non-Design</li> <li>• UNE Design</li> <li>• Resale Residence</li> <li>• Resale Business</li> <li>• BST Interconnection Trunks</li> <li>• BST Residence Retail</li> <li>• BST Business Retail</li> </ul> <p><u>Local Interconnection Trunk Group Blockage</u></p> <ul style="list-style-type: none"> <li>• BST CTTG Trunk Groups</li> <li>• CLEC Trunk Groups</li> </ul>
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Appendix A: Reporting Scope

<p><b>Standard Service Order Activities</b></p> <p><i>These are the generic BST/CLEC service order activities which are included in the Pre-Ordering, Ordering, and Provisioning sections of this document. It is not meant to indicate specific reporting categories.</i></p>	<ul style="list-style-type: none"> <li>• New Service Installations</li> <li>• Service Migrations Without Changes</li> <li>• Service Migrations With Changes</li> <li>• Move and Change Activities</li> <li>• Service Disconnects (Unless noted otherwise)</li> </ul>
<p><b>Pre-Ordering Query Types:</b></p>  <p><b>Maintenance Query Types:</b></p>	<ul style="list-style-type: none"> <li>• Address</li> <li>• Telephone Number</li> <li>• Appointment Scheduling</li> <li>• Customer Service Record</li> <li>• Feature Availability</li> </ul>
<p><b>Report Levels</b></p>	<ul style="list-style-type: none"> <li>• CLEC RESH</li> <li>• CLEC MSA</li> <li>• CLEC State</li> <li>• CLEC Region</li> <li>• Aggregate CLEC State</li> <li>• Aggregate CLEC Region</li> <li>• BST State</li> <li>• BST Region</li> </ul>

\* Scope is report, data source and system dependent, and, therefore, will differ with each report.

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Appendix B: Glossary of Acronyms and Terms

<b>A</b>	<b>ACD</b>	Automatic Call Distributor - A service that provides status monitoring of agents in a call center and routes high volume incoming telephone calls to available agents while collecting management information on both callers and attendants.
	<b>AGGREGATE</b>	Sum total of all items in like category, e.g. CLEC aggregate equals the sum total of all CLECs' data for a given reporting level.
	<b>ASR</b>	Access Service Request - A request for access service terminating delivery of carrier traffic into a Local Exchange Carrier's network.
	<b>ATLAS</b>	Application for Telephone Number Load Administration System - The BellSouth Operations System used to administer the pool of available telephone numbers and to reserve selected numbers from the pool for use on pending service requests/service orders.
	<b>ATLASTN</b>	ATLAS software contract for Telephone Number
	<b>AUTO CLARIFICATION</b>	The number of LSRs that were electronically rejected from LESOG and electronically returned to the CLEC for correction.
<b>B</b>	<b>BILLING</b>	The process and functions by which billing data is collected and by which account information is processed in order to render accurate and timely billing.
	<b>BOCRIS</b>	Business Office Customer Record Information System - A front-end presentation manager used by BellSouth organizations to access the CRIS database.
	<b>BRC</b>	Business Repair Center - The BellSouth Business Systems trouble receipt center which serves large business and CLEC customers.
	<b>BST</b>	BellSouth Telecommunications, Inc.
<b>C</b>	<b>CKTID</b>	A unique identifier for elements combined in a service configuration
	<b>CLEC</b>	Competitive Local Exchange Carrier
	<b>CMDS</b>	Centralized Message Distribution System - BellCore administered national system used to transfer specially formatted messages among companies.
	<b>COFFI</b>	Central Office Feature File Interface - A BellSouth Operations System database which maintains Universal Service Order Code (USOC) information based on current tariffs.

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**Appendix B: Glossary of Acronyms and Terms - Continued**

<b>C</b>	<b>COFIUSOC</b>	COFFI software contract for feature/service information
	<b>CRIS</b>	Customer Record Information System - The BellSouth proprietary corporate database and billing system for non-access customers and services.
	<b>CRSACCTS</b>	CRIS software contract for CSR information
	<b>CSR</b>	Customer Service Record
	<b>CTTG</b>	Common Transport Trunk Group - Final trunk groups between BST & Independent end offices and the BST access tandems.
<b>D</b>	<b>DESIGN</b>	Design Service is defined as any Special or Plain Old Telephone Service Order which requires BellSouth Design Engineering Activities
	<b>DISPOSITION &amp; CAUSE</b>	Types of trouble conditions, e.g. No Trouble Found, Central Office Equipment, Customer Premises Equipment, etc.
	<b>DLETH</b>	Display Lengthy Trouble History - A history report that gives all activity on a line record for trouble reports in LMOS
	<b>DLR</b>	Detail Line Record - All the basic information maintained on a line record in LMOS, e.g. name, address, facilities, features etc.
	<b>DOE</b>	Direct Order Entry System - An internal BellSouth service order entry system used by BellSouth Service Representatives to input business service orders in BellSouth format.
	<b>DSAP</b>	DOE (Direct Order Entry) Support Application - The BellSouth Operations System which assists a Service Representative or similar carrier agent in negotiating service provisioning commitments for non-designed services and UNEs.
	<b>DSAPDDI</b>	DSAP software contract for schedule information
<b>E</b>	<b>E911</b>	Provides callers access to the applicable emergency services bureau by dialing a 3-digit universal telephone number.
	<b>EDI</b>	Electronic Data Interchange - The computer-to-computer exchange of inter and/or intra company business documents in a public standard format.
<b>F</b>	<b>FATAL REJECT</b>	The number of LSRs that were electronically rejected from LEO, which checks to see if the LSR has all the required fields correctly populated
	<b>FLOW-THROUGH</b>	In the context of this document, LSRs submitted electronically via the CLEC mechanized ordering process that flow through to the BST OSS without manual or human intervention.
	<b>FOC</b>	Firm Order Confirmation - A notification returned to the CLEC confirming that the LSR has been received and accepted, including the specified commitment date.

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**Appendix B: Glossary of Acronyms and Terms - Continued**

<b>G</b>		
<b>H</b>	<b>HAL</b>	"Hands Off" Assignment Logic - Front end access and error resolution logic used in interfacing BellSouth Operations Systems such as ATLAS, BOCRIS, LMOS, PSIMS, RSAG and SOCS.
	<b>HALCRIS</b>	HAL software contract for CSR information
<b>I</b>	<b>ISDN</b>	Integrated Services Digital Network
<b>K</b>		
<b>L</b>	<b>LCSC</b>	Local Carrier Service Center - The BellSouth center which is dedicated to handling CLEC LSRs, ASRs, and Preordering transactions along with associated expedite requests and escalations.
	<b>LEGACY SYSTEM</b>	Term used to refer to BellSouth Operations Support Systems (see OSS)
	<b>LENS</b>	Local Exchange Negotiation System - The BellSouth LAN/web server/OS application developed to provide both preordering and ordering electronic interface functions for CLECs.
	<b>LEO</b>	Local Exchange Ordering - A BellSouth system which accepts the output of EDI, applies edit and formatting checks, and reformats the Local Service Requests in BellSouth Service Order format.
	<b>LESOG</b>	Local Exchange Service Order Generator - A BellSouth system which accepts the service order output of LEO and enters the Service Order into the Service Order Control System using terminal emulation technology.
	<b>LMOS</b>	Loop Maintenance Operations System - A BellSouth Operations System that stores the assignment and selected account information for use by downstream OSS and BellSouth personnel during provisioning and maintenance activities.
	<b>LMOS HOST</b>	LMOS host computer
	<b>LMOSupd</b>	LMOS updates
	<b>LNP</b>	Local Number Portability - In the context of this document, the capability for a subscriber to retain his current telephone number as he transfers to a different local service provider.
	<b>LOOPS</b>	Transmission paths from the central office to the customer premises.
	<b>LSR</b>	Local Service Request - A request for local resale service or unbundled network elements from a CLEC.
<b>M</b>	<b>MAINTENANCE &amp; REPAIR</b>	The process and function by which trouble reports are passed to BellSouth and by which the related service problems are resolved.
	<b>MARCH</b>	A BellSouth Operations System which accepts service orders, interprets the coding contained in the service order image, and constructs the specific switching system Recent Change command messages for input into end office switches.

BellSouth  
Service Quality Measurements  
Regional Performance Reports

**Appendix B: Glossary of Acronyms and Terms – Continued**

<b>N</b>	<b>NC</b>	"No Circuits" - All circuits busy announcement
<b>O</b>	<b>OASIS</b>	Obtain Availability Services Information System - A BellSouth front-end processor, which acts as an interface between COFFI and RNS. This system takes the USOCs in COFFI and translates them to English for display in RNS.
	<b>OASISBSN</b>	OASIS software contract for feature/service
	<b>OASISCAR</b>	OASIS software contract for feature/service
	<b>OASISLPC</b>	OASIS software contract for feature/service
	<b>OASISMTN</b>	OASIS software contract for feature/service
	<b>OASISNET</b>	OASIS software contract for feature/service
	<b>OASISOCP</b>	OASIS software contract for feature/service
	<b>ORDERING</b>	The process and functions by which resale services or unbundled network elements are ordered from BellSouth as well as the process by which an LSR or ASR is placed with BellSouth.
	<b>OSPCM</b>	Outside Plant Contract Management System - Provides Scheduling Information.
	<b>OSS</b>	Operations Support System - A support system or database which is used to mechanize the flow or performance of work. The term is used to refer to the overall system consisting of hardware complex, computer operating system(s), and application which is used to provide the support functions.
	<b>OUT OF SERVICE</b>	Customer has no dial tone and cannot call out.
<b>P</b>	<b>POTS</b>	Plain Old Telephone Service
	<b>PREDICTOR</b>	The BellSouth Operations system which is used to administer proactive maintenance and rehabilitation activities on outside plant facilities, provide access to selected work groups (e.g. RRC & BRC) to Mechanized Loop Testing and switching system I/O ports, and provide certain information regarding the attributes and capabilities of outside plant facilities.
	<b>PREORDERING</b>	The process and functions by which vital information is obtained, verified, or validated prior to placing a service request.
	<b>PROVISIONING</b>	The process and functions by which necessary work is performed to activate a service requested via an LSR or ASR and to initiate the proper billing and accounting functions.
	<b>PSIMS</b>	Product/Service Inventory Management System - A BellSouth database Operations System which contains availability information on switching system features and capabilities and on BellSouth service availability. This database is used to verify the availability of a feature or service in an NXX prior to making a commitment to the customer.
	<b>PSIMSORB</b>	PSIMS software contract for feature/service

BellSouth  
Service Quality Measurements  
Regional Performance Reports

**Appendix B: Glossary of Acronyms and Terms – Continued**

<b>Q</b>		
<b>R</b>	<b>RNS</b>	Regional Negotiation System - An internal BellSouth service order entry system used by BellSouth Consumer Services to input service orders in BellSouth format.
	<b>RRC</b>	Residence Repair Center - The BellSouth Consumer Services trouble receipt center which serves residential customers.
	<b>RSAG</b>	Regional Street Address Guide - The BellSouth database, which contains street addresses validated to be accurate with state and local governments.
	<b>RSAGADDR</b>	RSAG software contract for address search
	<b>RSAGTN</b>	RSAG software contract for telephone number search
<b>S</b>	<b>SOCS</b>	Service Order Control System - The BellSouth Operations System which routes service order images among BellSouth drop points and BellSouth Operations Systems during the service provisioning process.
	<b>SOIR</b>	Service Order Interface Record - any change effecting activity to a customer account by service order that impacts 911/E911.
<b>T</b>	<b>TAFI</b>	Trouble Analysis Facilitation Interface - The BellSouth Operations System that supports trouble receipt center personnel in taking and handling customer trouble reports.
	<b>TAG</b>	Telecommunications Access Gateway – TAG was designed to provide an electronic interface, or machine-to-machine interface for the bi-directional flow of information between BellSouth's OSSs and participating CLECs.
	<b>TN</b>	Telephone Number
	<b>TOTAL MANUAL FALLOUT</b>	The number of LSRs which are entered electronically but require manual entering into a service order generator.
<b>U</b>	<b>UNE</b>	Unbundled Network Element
<b>V</b>		
<b>W</b>	<b>WTN</b>	A unique identifier for elements combined in a service configuration
<b>X</b>		
<b>Y</b>		
<b>Z</b>		
<b>Σ</b>		Sum of:

Appendix C

**BELLSOUTH'S AUDIT POLICY:**

BellSouth currently provides many CLECs with audit rights as a part of their individual interconnection agreements. However, it is not reasonable for BellSouth to undergo an audit for every CLEC with which it has a contract. As of June, 1999, that would equate to over 732 audits per year and that number is continually growing. BellSouth has developed a proposed Audit Plan for use by the parties to an audit. If requested by a Public Service Commission, BellSouth will agree to undergo a comprehensive audit of the aggregate level reports for both BellSouth and the CLECs for each of the next five (5) years (1999 – 2005), to be conducted by an independent third party. The results of that audit will be made available to all the parties subject to proper safeguards to protect proprietary information. This aggregate level audit includes the following specifications:

1. The cost shall be borne 50% by BellSouth and 50% by the CLECs.
2. The independent third party auditor shall be selected with input from BellSouth, the PSC, if applicable, and the CLEC(s).
3. BellSouth, the PSC and the CLECs shall jointly determine the scope of the audit.

BellSouth reserves the right to make changes to this audit policy as growth and changes in the industry dictate.

Attachment 5:

Infrastructure Proposal for  
Federal High Cost Offset

**Proposed USF High Cost Fund  
Infrastructure Investment**

<b>Project Name</b>	<b>Capital Investment</b>	<b>Description</b>
Elkhorn City-Freeburn-Pikeville Ring	\$900,000	OC-12 Fiber Ring
South Williamson-Inez-Pikeville Ring	\$1,300,000	OC-48 Fiber Ring
Springfield-Salvisa-Danville Ring	\$415,000	OC-12 Fiber Ring
Burgin-Harrodsburg-Danville Ring	\$555,000	OC-3+ Fiber Ring
Sorgho-Owensboro-Panther Ring	\$920,000	OC-12 Fiber Ring
Sturgis-Henderson-Madisonville Ring	\$1,000,000	OC-48 Fiber Ring
<b>Total Investment</b>	<b>\$5,090,000</b>	

<b>Effected Wirecenter CLLI</b>	<b>City</b>	<b>County</b>	<b>Requires Federal Support</b>
BRGNKYMA	Burgin	Mercer	YES
CLAYKYMA	Clay	Webster	YES
CYDNKYMA	Corydon	Henderson	YES
DAVLKYMA	Danville	Boyle	NO**
ELCYKYES	Elkhorn City	Pike	YES
FDCKKYES	Feds creek	Pike	YES
FEBRKYMA	Freeburn	Pike	YES
HABTKYMA	Habit	Daviess	YES
HANSKYMA	Hanson	Hopkins	YES
HDBGKYMA	Harrodsburg	Mercer	YES
HNSNKYMA	Henderson	Henderson	NO**
INEZKYMA	Inez	Martin	YES
MDVIKYMA	Madisonville	Hopkins	NO**
MGFDKYMA	Morganfield	Union	YES
NEBOKYMA	Nebo	Hopkins	YES
OWBOKYMA	Owensboro	Daviess	NO**
PKVLKYMA	Pikeville	Pike	YES
PKVLKYMT	Pikeville Meta	Pike	YES
PLRGKYMA	Pleasant Ridge	Daviess	YES
PNTHKYMA	Panther	Daviess	YES
PRVDKYMA	Providence	Webster	YES
PRVLKYMA	Perryville	Boyle	YES
RBRDKYMA	Robards	Henderson	YES
SLVSKYMA	Salvisa	Mercer	YES
SEBRKYMA	Sebree	Webster	YES
SLGHKYMA	Slaughters	Webster	YES
SPFDKYMA	Springfield	Washington	YES
SRGHKYMA	Sorgho	Daviess	YES
STONKYMA	Stone	Pike	YES
STRGKYMA	Sturgis	Union	YES
SWSNKYMA	South Williamson	Pike	YES
UTICKYMA	Utica	Daviess	YES
WLVLKYMA	West Louisville	Daviess	YES
WRFDKYMA	Warfield	Martin	YES
WSBGKYMA	Willisburg	Washington	YES

\*\* Investment in this wire center is necessary to support investment in surrounding wire centers which qualify for federal support.

Attachment 6:

USTA TFP Study Update



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SEP 10 1999

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

September 10, 1999

Magalie Roman Salas  
Secretary  
Federal Communications Commission  
445 12<sup>th</sup> Street, SW  
TW-A325  
Washington, DC 20554

Re: Written Ex Parte Presentation  
CC Docket No. 94-1

Dear Ms. Salas:

Attached hereto is the latest update of the Commission's model used to determine the X-Factor for purposes of price cap regulation. The 1998 update, prepared for USTA by Professor Frank Gollop, utilizes the industry data shown in Attachment B. It simply replicates, without endorsement, the FCC model. The results demonstrate that the X-Factor for 1998 is 3.03 percent. The X-Factor average for the most recent five year period is 4.06 percent and the X-Factor average for the entire price cap era for which data are available, 1991-1998, is 4.12 percent. The update reveals that there is no evidence supporting the claim that the post-1995 X-Factors are biased downward because of the treatment of LEC earnings in the FCC's model.

Pursuant to Commission Rule 1.1206(b)(2), an original and one copy of this letter and attachment are being provided to you for inclusion in the public record for the above-referenced proceeding. Please contact me with any questions.

Respectfully submitted,

A handwritten signature in cursive script that reads "Linda L. Kent".

Linda L. Kent  
Associate General Counsel

Attachment

cc: Larry Strickling  
Jane Jackson  
Yog Varma  
Richard Lerner

Aaron Goldschmidt  
Jay Atkinson

**The FCC X-Factor:**

**1996-1998 Update**

**Prepared for USTA by**

**Frank M. Gollop**

**Professor of Economics**

**Boston College**

**August 20, 1999**

## EXECUTIVE SUMMARY

- The X-Factor for 1998 is 3.03. This latest update of the FCC's X-Factor model reinforces the lack of empirical support for the Commission's present 6.5% policy standard.
- The X-Factor average for the most recent five years is 4.06%. The X-Factor averages 4.12% over the entire 1991-98 price-cap era.

<u>Year</u>	<u>X-Factor</u>
1994	5.47
1995	6.20
1996	1.98
1997	3.62
1998	3.03
1991-98	4.12
1994-98	4.06

- X-Factors for 1996, 1997, and 1998 quantitatively refute what the Commission determined would be an increasing upward trend after the 1993-95 period. The average X-Factor in the 1996-98 period is 2.88, less than half the current 6.5 policy standard.
- Revisions posted recently by the Bureau of Labor Statistics to its TFP and input price data for the U.S. nonfarm sector have caused modest downward revisions in the 1995 through 1997 X-Factors previously reported in the April 14, 1999 X-Factor ex parte.
- The continuing trend reversal in labor input is a dominant source of the lower X-Factors after 1995. USTA's Reply Comments dated November 9, 1998 pointed out that the productivity gains resulting from sizable labor force reductions in the early price-cap years could not be sustained in the long run. Industry headcount has remained flat for the recent two years in contrast to the consistent labor force reductions at five percent annual rates in the 1991-95 period.
- The corollary to the labor input reversal also holds. As labor force reductions ended, the LECs experienced upward pressure in their labor compensation rates. While labor compensation per employee increased at a 3.3% annual rate between 1991 and 1995, it increased at a 4.6% rate in the 1995-98 period. The incremental 1.3 percentage points provide additional downward force on the post-1995 X-Factors.
- The update reveals that there is no evidence supporting the IXC claim that the post-1995 X-Factors are biased downward because of the treatment of LEC earnings in the FCC model. Over the 1995-98 period, the annual rates of input price change averaged 2.6%, 4.6%, and 3.8% for material, labor, and capital inputs, respectively. The trend in capital's input price is not unlike that for the other LEC inputs.

### **1 . Spreadsheet Model**

The 1998 update, like its two predecessors, replicates the FCC X-Factor model described in Appendix D of the Commission's May 1997 order. No changes are made to the definition of any of the variables in the model nor are any spreadsheet commands altered. The FCC model, without endorsement, is simply replicated. A complete set of charts, presented in exactly the same sequence and format found in the original FCC order, is attached to this document as Appendix A.

### **2 . Industry Data**

Appendix D of the Commission's May 1997 order identifies the data required by the FCC's X-Factor model as well as the forms and reports from which the data are to be extracted. A complete listing of the industry data provided by USTA for 1998 is presented in tabular form in Appendix B to this report. All industry data for previous years are taken directly from the X-Factor update reported in USTA's April 14, 1999 ex parte. There have been no subsequent revisions to industry data for 1995 or 1996. For 1997, only local call volume has been revised upward by four one-hundredths of one percent. It follows (as will be discussed below) that any changes in the 1995-97 X-Factors since the April 14, 1999 update derive from revisions made by the Bureau of Labor Statistics (BLS) and the Bureau of Economic Analysis (BEA) to the official U.S. data series used to form the FCC's productivity and input price differentials.

### **3 . Data Series Taken or Produced from U.S. Government Sources**

The text accompanying USTA's initial X-Factor update (Comments, October 26, 1998) describes in detail the four data series in the FCC model that are not extracted from industry sources but either are taken directly from or are constructed from data produced by the BLS or the BEA. These four series now are updated through 1998. FCC methods, as

described in the Commission's May 1997 order, are replicated. The interested reader is referred to the initial October 26, 1998 report for methodological details.

The BLS measures of total factor productivity (TFP) growth and input price growth for the U.S. nonfarm economy are used directly in the FCC model as the U.S. benchmarks against which the productivity and input price differential components of the X-Factor are computed. The BLS has updated these two series through 1997 and projects that its estimates for 1998 will not be available until early 2000. In the meantime, 1998 estimates for each series are calculated using the FCC convention (adopted in its May 1997 4th Report Order) of forming averages of the respective input price and TFP growth rates during the preceding five years. The resulting updated series are reported in columns B and E, respectively, of Chart D1 in Appendix A to this report. A comparison of the revised BLS series with their immediate predecessors is provided in the next section.

The other two government series used in the FCC model are price indexes. The "materials price index" and the "composite asset price" appear in Charts D8 and D9, respectively. (See Appendix A.) FCC sources and methods are replicated. Both price series are formed as weighted averages of disaggregated price data. In the case of the materials price index, the required 183-order prices in the BLS interindustry accounts are available through 1997. Following FCC convention, each of the 183-order prices for 1998 is estimated based on its 1997 level and its average growth rate over the preceding five years. Corresponding 183-order weights for 1998 are formed by interpolating expenditure shares for the communications industry taken from the BLS input/output tables for 1995 and 2006. For the composite asset price, the underlying three BEA asset prices described in the FCC's 1997 order are available through 1997 and are updated through 1998 using the same five-year average growth rate procedure described above for material prices. Corresponding asset-specific weights for 1998 prices are formed using RBOC data for 1998 capital additions data as directed by the FCC model. The present update of the material price index caused no change in the 1995-97 material price indexes used in the April 14, 1999 update. Revisions in the underlying asset-

specific prices and weights for 1996 and 1997 caused the BEA composite asset price in Chart D9 to decrease by 0.2% for both years relative to their values reported in the April 14, 1999 update. The effect of this change on the X-Factor is discussed in the following section.

#### 4. The 1998 Update

The present update not only computes an X-Factor for 1998 but also incorporates all data revisions (discussed above) that have been posted for earlier years as of August 20, 1999. The following two tables provide a useful summary of the update results. Each presents the full set of seven columns found in the summary Chart D1 of the Commission's X-Factor model. Table 1 presents the 1994-97 component and X-Factor results reported in the previous USTA update submitted as an ex parte April 14, 1999. The entries in the 1994 and 1995 rows are identical to those reported in the original FCC model released May 1997. Table 2 presents the corresponding results calculated in the present 1998 update. Each table begins with 1994 because it is the most recent year unaffected by BLS or BEA data revisions.

One's attention is immediately drawn to the "X-Factor" columns in the two tables. Two important conclusions are immediately apparent. First, posted revisions to 1995-97 data have reduced the X-Factors in each year: -0.50 percentage points for 1995, -0.58 percentage points for 1996, and -0.37 percentage points for 1997. Second, the 3.03% X-Factor for 1998 not only falls below the 3.62% X-Factor for 1997 but, like its 1996 and 1997 counterparts, also is well below the X-Factors found in the initial FCC report for 1993 (3.51%), 1994 (5.47%), and 1995 (6.70%), the three years so important in the Commission's decision to peg its current policy standard at 6.5%.

Discussion focusing on the 1998 X-Factor will continue below but it is first instructive to analyze the sources of change in the 1995-97 X-Factors. A column-by-column comparison of the two tables reveals that the changes in 1995-97 X-Factors mainly derive from revisions to the BLS TFP and input price data series. The 1995 and 1996 entries in the RBOC columns A and D are identical in both tables. The 1997 column A entry decreases by only 0.01 due to a

Table 1

**Update Results: April 14, 1999  
(USTA Ex Parte)**

Chart D1: Components of FCC LEC Price Cap X-Factor (Excluding CPD)

Year	Input Price Growth Rates			TFP Growth Rates			X-Factor G=C+F
	Total RBOCs A	U.S. B	Input Price Differential C=B-A	Total RBOCs D	U.S. E	TFP Differential F=D-E	
1994	-0.05	3.37	3.42	2.35	0.30	2.05	5.47
1995	1.23	2.61	1.38	5.11	-0.20	5.31	6.70
1996	5.94	3.00	-2.94	6.40	0.89	5.50	2.56
1997	0.90	2.86	1.96	2.59	0.58	2.01	3.97

Table 2

**Update Results: August 20, 1999**

Chart D1: Components of FCC LEC Price Cap X-Factor (Excluding CPD)

Year	Input Price Growth Rates			TFP Growth Rates			X-Factor G=C+F
	Total RBOCs A	U.S. B	Input Price Differential C=B-A	Total RBOCs D	U.S. E	TFP Differential F=D-E	
1994	-0.05	3.37	3.42	2.35	0.30	2.05	5.47
1995	1.23	2.61	1.38	5.11	0.30	4.82	6.20
1996	5.94	3.00	-2.94	6.40	1.48	4.92	1.98
1997	0.89	2.30	1.41	2.60	0.39	2.21	3.62
1998	3.85	2.69	-1.16	4.72	0.53	4.19	3.03

revision in the BEA composite asset price discussed above; the 1997 column D entry increases by only 0.01 due to the +0.04% revision in 1997 local call volume.

It is revisions in the BLS input price and TFP data for the U.S. nonfarm sector that are responsible for the downward revisions to the X-Factors in 1995, 1996, and 1997. A comparison of the "U.S." columns B and E across the two tables indicates that upward revisions to U.S. nonfarm TFP growth for 1995 and 1996 are solely responsible for the resulting -0.50 and -0.58 declines in the X-Factors for those years. In 1997, the BLS adjusted nonfarm TFP growth and input price growth downward by 0.19 and 0.56 percentage points, respectively, with a net -0.37 effect on the 1997 X-Factor. With its revisions to its 1995-97 series, the BLS captured the strong productivity and input price performance registered by the economy in recent years. Given the differential structure of the FCC's X-Factor model, these upward revisions to U.S. performance result in downward adjustments to the X-Factors.

Examination of the 1998 X-Factor in Chart D1 (Appendix A) begins with recognizing that its 3.03% level makes it the second lowest X-Factor in the entire price-cap era 1991-98. Moreover, like the corresponding X-Factors for 1996 and 1997, the 3.03% measure for 1998 quantitatively refutes what the Commission determined would be an increasing upward trend after the 1993-95 period.<sup>1</sup> In fact, the average X-Factor in the 1996-98 period is 2.88%, less than half the 6.5% X-Factor presently adopted by the Commission in its price-cap model.

A source decomposition of the 3.03% X-Factor yields some useful insights. First, on the productivity side of the ledger, labor input continues to exhibit a trend reversal (Chart D6). In contrast to consistent labor force reductions at five percent annual rates over the 1991-95 period, labor input's decline slowed in 1996 (-2.6%) and reversed direction in 1997 (0.04%). The trend reversal continued in 1998 with labor input increasing at a 0.07% annual rate. As predicted in USTA's November 9, 1998 Reply Comments, early

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<sup>1</sup> Para 139, FCC 4th Report Order, CC Docket 94-1.

productivity gains resulting from sizable labor force reductions in the early price-cap years could not be sustained in the long run. This continuing trend reversal is a dominant source of the lower X-Factors after 1995. Second, on the input price side of the ledger, the corollary to the reversal in labor force trends reveals itself. The LECs are experiencing upward pressure in their labor compensation rates. While labor compensation per employee increased at a 3.3% annual rate between 1991 and 1995, it increased at a 4.6% rate in the 1995-98 period (Chart D6). The incremental 1.3 percentage points flow directly into the input price differential, providing an additional downward force on the X-Factor. A third insight also follows from an examination of input price trends. Relative to 1997, the material, labor, and capital input price indexes increased at 2.5% (Chart D8), 3.7% (Chart D6), and 4.99% (Chart D9) rates. Over the three year 1995-98 period, the corresponding rates of input price change averaged 2.6%, 4.6%, and 3.8%, respectively. There is no evidence supporting the IXC claim that the post-1995 X-Factors are biased downward because of a design flaw in the way that LEC earnings enter the FCC model, purportedly inflating the LECs' input price for capital and thereby driving X down. The evidence reveals that the trend in capital's input price is not unlike that for the other LEC inputs and, moreover, the increase in labor compensation rates actually exceeds that for capital in the post-1995 period. The IXCs' argument has no quantitative support in the FCC model.

## **5. Conclusion**

The important bottom-line policy conclusion follows from an examination of the empirical history of the X-Factor during the eight-year period of price-cap regulation. The bottom panel of Chart D1 indicates that the X-Factor averaged 4.12% during the 1991-98 interval. During the more recent five-year period (the time interval commonly used by the Commission in its analysis), the X-Factor averaged 4.06%. The update of the FCC's own model provides no empirical support for the Commission's present 6.5% policy standard.

APPENDIX A

1996-1998 UPDATE OF FCC MODEL

Chart D1: Components of FCC LEC Price Cap X-Factor [Excluding CPD]

Year	Input Price Growth Rates			Total Factor Productivity Growth Rates			LEC Price/Productivity Differential G=C+F
	Total RBOCs	U.S. Nonfarm Business Sector	Differential	Total RBOCs	U.S. Nonfarm Business Sector	Differential	
	A	B	C=B-A	D	E	F=D-E	
1984							
1985							
1986	5.20%	2.33%	-2.87%	2.84%	1.10%	1.74%	-1.13%
1987	0.72%	3.45%	2.73%	3.13%	-0.50%	3.63%	6.36%
1988	-1.39%	5.02%	6.41%	0.32%	0.30%	0.02%	6.42%
1989	-2.40%	2.42%	4.82%	1.90%	0.20%	1.70%	6.52%
1990	1.86%	3.31%	1.45%	6.83%	-0.70%	7.53%	8.99%
1991	-0.69%	1.77%	2.46%	2.19%	-1.41%	3.60%	6.06%
1992	2.79%	3.15%	0.36%	4.43%	1.71%	2.72%	3.08%
1993	2.47%	2.18%	-0.29%	4.00%	0.20%	3.80%	3.51%
1994	-0.05%	3.37%	3.42%	2.35%	0.30%	2.05%	5.47%
1995	1.23%	2.61%	1.38%	5.11%	0.30%	4.82%	6.20%
1996	5.94%	3.00%	-2.94%	6.40%	1.48%	4.92%	1.98%
1997	0.89%	2.30%	1.41%	2.60%	0.39%	2.21%	3.62%
1998	3.85%	2.69%	-1.16%	4.72%	0.53%	4.19%	3.03%
Averages							
[1986-94]	0.94%	3.00%	2.05%	3.11%	0.13%	2.98%	5.03%
[1986-95]	0.97%	2.96%	1.99%	3.31%	0.15%	3.16%	5.15%
[1987-95]	0.50%	3.03%	2.53%	3.36%	0.04%	3.32%	5.85%
[1988-95]	0.48%	2.98%	2.50%	3.39%	0.11%	3.28%	5.78%
[1989-95]	0.74%	2.69%	1.94%	3.83%	0.09%	3.75%	5.69%
[1990-95]	1.27%	2.73%	1.46%	4.15%	0.07%	4.09%	5.55%
[1991-95]	1.15%	2.62%	1.47%	3.62%	0.22%	3.40%	4.86%
[1986-98]	1.57%	2.89%	1.32%	3.60%	0.30%	3.30%	4.62%
[1987-98]	1.27%	2.94%	1.67%	3.67%	0.23%	3.43%	5.10%
[1988-98]	1.32%	2.89%	1.57%	3.71%	0.30%	3.41%	4.99%
[1989-98]	1.59%	2.68%	1.09%	4.05%	0.30%	3.75%	4.85%
[1990-98]	2.03%	2.71%	0.68%	4.29%	0.31%	3.98%	4.66%
[1991-98]	2.05%	2.63%	0.58%	3.98%	0.44%	3.54%	4.12%
[1992-98]	2.45%	2.76%	0.31%	4.23%	0.70%	3.53%	3.84%
[1993-98]	2.39%	2.69%	0.30%	4.20%	0.53%	3.67%	3.97%
[1994-98]	2.37%	2.79%	0.42%	4.24%	0.60%	3.64%	4.06%

## Chart D2: RBOC Interstate Revenues

Year	End User		Interstate		Special		Total	
	A	B	Switched	Access	Access	C	D = A + B + C	
1984	\$1,499,413,893	\$10,906,203,190			\$1,960,688,644		\$14,366,305,727	
1985	\$2,400,475,814	\$10,484,265,170			\$2,574,800,716		\$15,459,541,700	
1986	\$3,090,639,929	\$9,611,996,187			\$2,657,677,439		\$15,360,313,555	
1987	\$3,604,221,000	\$9,662,529,000			\$2,539,698,000		\$15,806,448,000	
1988	\$4,398,692,000	\$9,092,575,000			\$2,253,922,000		\$15,745,189,000	
1989	\$4,679,142,000	\$8,595,750,000			\$2,209,064,000		\$15,483,956,000	
1990	\$4,828,177,000	\$8,514,130,000			\$2,119,037,000		\$15,461,344,000	
1991	\$4,963,262,000	\$8,650,880,000			\$2,153,565,000		\$15,767,707,000	
1992	\$5,244,094,000	\$8,999,065,000			\$2,097,997,000		\$16,341,156,000	
1993	\$5,589,662,000	\$9,293,783,000			\$2,217,125,000		\$17,100,570,000	
1994	\$5,770,285,000	\$9,332,869,000			\$2,529,667,000		\$17,632,821,000	
1995	\$5,930,960,000	\$9,409,639,000			\$3,070,598,000		\$18,411,197,000	
1996	\$6,268,026,000	\$8,763,815,000			\$3,851,028,000		\$18,882,869,000	
1997	\$7,807,872,000	\$7,275,241,000			\$4,815,249,000		\$19,898,362,000	

Chart D3: RBOC REVENUES (Excluding Miscellaneous Services)

Year	Local Service	Intrastate Toll and Intrastate Access	Interstate	Total
	A	B	C	D = A + B + C
1984				
1985	\$26,960,554,164	\$13,047,095,682	\$14,366,305,727	\$54,373,955,573
1986	\$28,626,174,049	\$13,538,946,795	\$15,459,541,700	\$57,624,662,544
1987	\$29,150,842,991	\$14,166,723,124	\$15,360,313,555	\$58,677,879,670
1988	\$29,226,988,000	\$14,994,975,000	\$15,806,448,000	\$60,028,411,000
1989	\$29,973,157,000	\$14,868,219,000	\$15,745,189,000	\$60,586,565,000
1990	\$30,699,085,000	\$15,014,729,000	\$15,483,956,000	\$61,197,770,000
1991	\$32,059,008,000	\$14,522,276,000	\$15,461,344,000	\$62,042,628,000
1992	\$33,359,990,000	\$14,225,181,000	\$15,767,707,000	\$63,352,878,000
1993	\$34,598,957,000	\$14,496,831,000	\$16,341,156,000	\$65,436,944,000
1994	\$35,758,637,000	\$14,355,983,000	\$17,100,570,000	\$67,215,190,000
1995	\$37,684,860,000	\$13,123,225,000	\$17,632,821,000	\$68,440,906,000
1996	\$40,523,387,000	\$12,987,476,000	\$18,411,197,000	\$71,922,060,000
1997	\$42,460,592,000	\$12,308,613,000	\$18,882,869,000	\$73,652,074,000
1998	\$44,993,354,000	\$11,978,176,000	\$19,898,362,000	\$76,869,892,000

Chart D. Calculation of Fisher Ideal Index for Interstate Output

Year	Revenue Shares			Quantities			Output Indices			Fisher Relative C=(A*B)^0.5	Interstate Output Quantity Index	Growth
	End User	Interstate		Special Access	Access Lines	Switched Access Minutes	Laspayres		Paasche			
		Switched Access	Special Access				A	B				
1984												
1985	10.44%	75.92%	13.65%	92,671,959	156,853,820,000	1,230,590	1,000000	1,000000	1,000000	1,000000	1,000000	5.14%
1986	15.53%	67.82%	16.66%	95,333,884	157,302,701,000	1,664,101	1,053249	1,052253	1,052253	1,052751	1,052751	7.78%
1987	20.12%	62.58%	17.30%	98,228,585	173,154,171,000	1,764,445	1,083098	1,078813	1,078813	1,080953	1,137975	12.19%
1988	22.80%	61.13%	16.07%	98,270,787	187,663,836,000	2,701,617	1,144443	1,114960	1,114960	1,129605	1,285462	6.05%
1989	27.94%	57.75%	14.31%	101,190,050	210,408,134,000	2,448,090	1,065768	1,058920	1,058920	1,062338	1,365595	11.49%
1990	30.22%	55.51%	14.27%	103,857,888	231,860,298,000	3,518,005	1,129086	1,114500	1,114500	1,121769	1,531882	9.83%
1991	31.23%	55.07%	13.71%	107,383,807	246,710,182,000	5,151,699	1,111811	1,094856	1,094856	1,103301	1,690127	5.86%
1992	31.48%	54.86%	13.66%	108,938,065	262,187,855,000	6,033,139	1,082516	1,060258	1,060258	1,081386	1,793878	11.27%
1993	32.09%	55.07%	12.84%	112,186,681	278,173,181,000	10,153,615	1,136148	1,102619	1,102619	1,119258	2,007812	6.71%
1994	32.69%	54.35%	12.97%	115,284,861	298,342,017,323	13,824,365	1,095119	1,086800	1,086800	1,090952	2,190425	9.59%
1995	32.72%	52.93%	14.35%	119,887,506	334,981,592,000	16,107,677	1,101268	1,089925	1,089925	1,100596	2,410774	9.63%
1996	32.21%	51.11%	16.88%	125,333,998	363,445,050,000	20,775,150	1,101412	1,100708	1,100708	1,101080	2,654407	7.73%
1997	33.19%	46.41%	20.39%	131,456,355	387,587,898,669	24,478,958	1,079432	1,081360	1,081360	1,080396	2,867610	9.09%
1998	39.24%	36.66%	24.20%	136,170,133	407,903,661,000	31,620,187	1,095710	1,084610	1,084610	1,095160	3,140710	8.80%
												8.76%
												8.60%

Chart D Calculation of Fisher Ideal Index for Total Company Output

Year	Revenue Shares			Quantities			Output Indices			Total Company Output Index	Growth	
	Intrastate Toll Access			Intrastate DEMs			Laspyres					Fisher Relative $C=(A \cdot B)^{0.5}$
	A	B	C	Number of Local Calls	Interstate Quantity Index	A	B	C				
1984												
1985	49.58%	24.00%	26.42%	310,696,999,600	164,191,177,000	1.000000	1.000000	1.000000	1.000000	1.000000	3.45%	
1986	49.68%	23.50%	26.83%	315,839,746,231	173,173,536,000	1.052751	1.035272	1.034885	1.035083	1.035083	4.22%	
1987	49.68%	24.14%	26.18%	320,735,770,416	183,597,411,000	1.137975	1.043581	1.042639	1.043100	1.079686	3.98%	
1988	49.47%	24.98%	26.33%	318,724,184,964	191,804,837,000	1.285482	1.041738	1.039449	1.040592	1.123522	5.23%	
1989	50.16%	24.54%	25.99%	330,212,044,704	207,298,177,000	1.365595	1.054001	1.053389	1.053695	1.183850	5.98%	
1990	51.87%	24.53%	25.30%	342,403,840,684	217,913,904,000	1.531892	1.062478	1.060759	1.061618	1.256797	4.25%	
1991	52.66%	23.41%	24.92%	353,219,571,000	219,713,721,000	1.690127	1.044009	1.042832	1.043420	1.311367	3.73%	
1992	52.67%	22.45%	24.89%	365,468,629,000	224,278,538,000	1.793878	1.038080	1.038005	1.038042	1.361254	4.77%	
1993	53.20%	21.36%	24.97%	376,995,406,000	227,540,869,000	2.007812	1.049558	1.048164	1.048860	1.427765	5.08%	
1994	55.06%	19.17%	25.44%	392,601,075,000	235,362,364,000	2.190425	1.052215	1.052028	1.052121	1.502182	5.89%	
1995	56.34%	18.06%	25.76%	409,383,799,000	246,926,539,000	2.410774	1.058829	1.058314	1.058572	1.590167	5.42%	
1996	57.65%	16.71%	25.60%	422,262,867,000	263,719,641,000	2.654407	1.056399	1.056052	1.056725	1.676780	4.09%	
1997	58.53%	15.58%	25.64%	433,316,755,000	273,526,580,000	2.867810	1.042045	1.041424	1.041734	1.748843	5.14%	
1998			25.89%	444,638,659,000	296,776,339,000	3.140710	1.053532	1.052051	1.052791	1.841166	4.64%	
									Average[1986-95]		4.66%	
									Average[1986-97]		4.70%	
									Average[1986-98]			

Chart D6: Labor Input Price and Growth

Year	Total Employees A	Total Compensation B	Labor Rate Annual C = B / A	Labor Price Index (Base = 1985)	Labor Growth %Chg In A
1984					
1985	504,113	16,991,572,326	33705.88	1.000000	
1986	482,698	16,728,435,454	34656.11	1.028192	-4.34%
1987	477,714	16,978,905,847	35541.99	1.054474	-1.04%
1988	466,827	17,030,359,791	36481.09	1.082336	-2.31%
1989	461,149	16,910,850,694	36671.12	1.087974	-1.22%
1990	443,105	17,586,868,921	39690.07	1.177541	-3.99%
1991	414,457	17,186,211,200	41466.81	1.230255	-6.68%
1992	411,167	17,160,988,000	41737.27	1.238279	-0.80%
1993	395,639	17,956,438,000	45385.91	1.346528	-3.85%
1994	367,196	17,154,284,000	46716.97	1.386018	-7.46%
1995	346,843	16,203,522,000	46717.17	1.386024	-5.70%
1996	338,040	16,597,889,075	49100.37	1.456730	-2.57%
1997	338,177	17,451,673,000	51605.14	1.531043	0.04%
1998	338,404	18,128,861,000	53571.65	1.589386	0.07%
			Average[1986-95]		-3.74%
			Average[1986-97]		-3.33%
			Average[1986-98]		-3.07%

Chart D7. Summary of Capital Adjustments and Average Depreciation

Year	TPIS,BOY A	Unadj. Additions B	TPIS,EOY C	Retires D=A+B-C	Adjustment Factor E	Adjusted Addition: F = B * E	Adjusted EOY TPIS G = A+F-D	Depreciation Accruals H	Adjusted Depreciation Rate I=H/((A+G)/2)
1984									
1985	138,879,365	15,001,998	149,061,793	4,819,569	0.8880	13,321,774	147,381,569	10,241,376	7.155%
1986	149,061,793	14,842,725	159,010,189	4,894,328	0.8880	13,180,340	157,347,804	11,826,961	7.720%
1987	159,010,189	14,138,370	167,720,577	5,427,983	0.8880	12,554,872	166,137,079	13,311,655	8.188%
1988	168,505,114	14,284,742	175,860,216	6,929,640	1.0000	14,284,742	175,860,216	13,134,992	7.629%
1989	175,860,216	13,283,569	182,978,381	6,165,404	1.0000	13,283,569	182,978,381	13,420,810	7.480%
1990	182,978,381	14,476,334	187,168,695	10,286,020	1.0000	14,476,334	187,168,695	13,439,933	7.262%
1991	187,168,695	14,527,049	192,034,545	9,661,199	1.0000	14,527,049	192,034,545	13,200,593	6.962%
1992	192,034,545	14,611,866	196,411,915	10,234,486	1.0000	14,611,866	196,411,915	13,337,581	6.867%
1993	196,411,915	14,860,116	203,082,418	8,189,613	1.0000	14,860,116	203,082,418	14,032,782	7.025%
1994	203,082,418	14,717,999	209,325,562	8,474,855	1.0000	14,717,999	209,325,562	14,863,196	7.208%
1995	209,325,562	15,374,568	217,430,207	7,269,923	1.0000	15,374,568	217,430,207	15,358,553	7.198%
1996	217,430,207	18,028,150	227,317,120	8,139,237	1.0000	18,028,150	227,317,120	16,252,281	7.309%
1997	227,317,120	18,253,199	236,896,179	8,674,140	1.0000	18,253,199	236,896,179	16,667,034	7.181%
1998	236,896,179	18,553,791	248,970,288	6,479,661	1.0000	18,553,791	248,970,289	17,154,619	7.061%
							Average[1985-95]		7.336%
							Average[1985-97]		7.322%
							Average[1985-98]		7.303%

Chart D Construction of Materials Quantity Index

Year	Materials Price Index (1985=1.00) A	Operating Expense B	Depreciation & Amortization Expense C	Employee Compensation D	Materials Expense E = B - C - D	Materials Quantity Index F = E / A	Materials Quantity Index (1985 = 1.0) G	Materials Quantity Index Growth H
1984	1.000000	40,953,072,435	10,024,710,656	16,991,572,326	13,936,789,453	13,936,789,453	1.000000	
1985	1.031346	42,424,084,849	11,592,001,248	16,728,435,454	14,103,648,147	13,674,987,526	0.981215	-1.90%
1986	1.053529	44,293,127,430	13,316,999,560	16,978,905,847	13,997,222,023	13,286,033,126	0.953307	-2.89%
1987	1.086392	46,809,139,000	13,646,937,000	17,030,359,791	16,131,842,209	14,849,003,149	1.065454	11.12%
1988	1.126234	48,600,813,000	13,860,101,000	16,910,850,694	17,829,861,306	15,831,394,231	1.135943	6.41%
1989	1.172025	49,544,744,000	13,931,515,000	17,586,868,921	18,026,360,079	15,380,530,820	1.103592	-2.89%
1990	1.204935	50,901,049,000	13,499,778,000	17,186,211,200	20,215,059,800	16,776,884,245	1.203784	8.69%
1991	1.234797	50,698,625,000	13,822,882,000	17,160,988,000	19,714,755,000	15,965,992,971	1.145601	-4.95%
1992	1.255352	52,766,635,000	14,244,514,000	17,956,438,000	20,565,683,000	16,382,401,649	1.175479	2.57%
1993	1.291436	55,916,863,000	15,068,058,000	17,154,284,000	23,694,521,000	18,347,418,469	1.316474	11.33%
1994	1.321671	58,831,094,000	15,556,284,000	16,203,522,000	25,071,288,000	18,969,381,288	1.361101	3.33%
1995	1.361400	57,884,494,000	16,377,242,000	16,597,889,075	24,909,362,925	18,298,870,339	1.312847	-3.61%
1996	1.395497	59,731,175,000	16,758,832,000	17,451,673,000	25,520,670,000	18,287,867,671	1.312201	-0.05%
1997	1.430735	60,836,253,000	17,306,863,000	18,128,861,000	25,400,529,000	17,753,487,504	1.273858	-2.97%

Chart D8a: Adjustments of 1985-87 RBOC Operating Expenses for Accounting Changes

Year	USTA Study		RBOC	
	Operating Expense A	Nonregulated Expense Adjustmts B	Capital/Expense Shift C	Operating Expense E
1985	46,223,368,251	406,886,403	1,985,079,714	38,938,104,053
1986	48,113,849,487	471,112,072	1,959,363,711	40,384,079,165
1987	49,562,282,080	1,089,570,002	1,908,791,685	41,766,392,483
			D = (A+B+C)/A	F = D * E
			Shift Factor	Adjusted Operating Exp.
			1.05175	40,953,072,435
			1.05052	42,424,084,849
			1.06050	44,293,127,430

Chart D Capital Quantity and Price Index Calculations

Year	Benchmark A	Adjusted Capital Additions B	BEA Composite Asset Price C	Capital Stock Quantity D	Capital Input Quantity E	Capital Input Quantity Growth F	Property Income /w Depreciation G	Capital Rental Price** H	Capital Rental Price Index I	Rental Price Index Growth J
1984	109,602,959	n/a	1.000000	103,803,095	1.000000				1.000000	
1985		13,321,774	1.010482	109,602,710	1.054855	0.053403	23,445,593,794	0.225648657	1.083329	8.00%
1986		13,180,340	1.027339	114,606,056	1.103009	0.04639	26,792,578,943	0.244451792	1.071191	-1.13%
1987		12,554,872	1.030466	118,419,511	1.139711	0.032733	27,701,751,800	0.241712809	1.005427	-6.34%
1988		14,284,742	1.070178	123,594,868	1.189521	0.042776	26,866,209,000	0.226873162	0.926740	-8.15%
1989		13,283,568	1.089729	126,940,642	1.221721	0.026711	25,845,853,000	0.209117526	0.893191	-3.89%
1990		14,476,334	1.102220	130,912,633	1.259851	0.030812	25,584,541,000	0.201547279	0.834161	-6.84%
1991		14,527,049	1.108304	134,489,094	1.294370	0.026951	24,641,357,000	0.186227208	0.872471	4.4%
1992		14,611,866	1.112312	137,807,183	1.326305	0.024372	26,477,135,000	0.196871985	0.865540	-0.80%
1993		14,860,116	1.117639	141,057,540	1.357587	0.023312	26,914,823,000	0.195307638	0.828365	-4.39%
1994		14,717,999	1.114609	143,878,628	1.384739	0.019902	26,366,385,000	0.18691936	0.836755	1.01%
1995		16,374,568	1.116623	147,115,146	1.415888	0.022246	27,166,086,000	0.188812588	0.916210	9.07%
1996		16,026,150	1.117644	152,437,614	1.467113	0.035540	30,414,808,000	0.206741514	0.891922	-2.69%
1997		18,253,199	1.117880	157,586,899	1.516672	0.033222	30,679,731,000	0.201260597	0.937604	4.99%
1998		18,553,791		162,626,701			33,340,502,000	0.211568996		

Chart Factor Shares of Total Payments

Year	Labor Compensation	Materials Payment	Property Income /w Depreciation	Total Factor Payment	Labor Compensation Share	Materials Payment Share	Property Income /w Depreciation Share
1984	16,991,572,326	13,936,789,453	23,445,593,794	54,373,955,573	31.25%	25.63%	43.12%
1985	16,728,435,454	14,103,648,147	26,792,578,943	57,624,682,544	29.03%	24.48%	46.49%
1986	16,978,905,847	13,997,222,023	27,701,751,800	58,677,879,670	28.94%	23.85%	47.21%
1987	17,030,359,791	16,131,842,209	26,866,209,000	60,028,411,000	28.37%	26.87%	44.76%
1988	16,910,850,694	17,829,861,306	25,845,853,000	60,586,565,000	27.91%	29.43%	42.66%
1989	17,586,868,921	18,026,360,079	25,584,541,000	61,197,770,000	28.74%	29.46%	41.81%
1990	17,186,211,200	20,215,059,800	24,641,357,000	62,042,628,000	27.70%	32.58%	39.72%
1991	17,160,988,000	19,714,755,000	26,477,135,000	63,352,878,000	27.09%	31.12%	41.79%
1992	17,956,438,000	20,565,683,000	26,914,823,000	65,436,944,000	27.44%	31.43%	41.13%
1993	17,154,284,000	23,694,521,000	26,366,385,000	67,215,190,000	25.52%	35.25%	39.23%
1994	16,203,522,000	25,071,288,000	27,166,096,000	68,440,906,000	23.68%	36.63%	39.69%
1995	16,597,889,075	24,909,362,925	30,414,808,000	71,922,060,000	23.08%	34.63%	42.28%
1996	17,451,673,000	25,520,670,000	30,679,731,000	73,652,074,000	23.69%	34.85%	41.65%
1997	18,128,861,000	25,400,529,000	33,340,502,000	76,869,892,000	23.58%	33.04%	43.37%

Chart Input Quantity Index

Year	Shares		Quantities			Quantity Indices				Growth	
	Labor Compensation	Materials Payment	Proportion Income /w Depreciation	Labor	Materials	Capital	Laspeyres	Paasche	Fisher Relative		Fisher Chain
							A	B	C=(A*B) <sup>0.5</sup>		
1984	31.25%	25.63%	43.12%	504,113	13,936,789,453	1,00000	1.00000	1.00000	1.00000	1.00000	1.00000
1985	29.03%	24.48%	46.49%	482,698	13,674,987,526	1,05486	0.96820	0.96822	1.00611	1.00611	0.61%
1986	28.94%	23.85%	47.21%	477,714	13,286,033,126	1,10301	0.98139	0.98140	1.01099	1.01717	1.09%
1987	28.37%	26.87%	44.76%	466,827	14,849,003,149	1,13971	1.04067	1.04083	1.03731	1.05512	3.66%
1988	27.91%	29.43%	42.66%	461,149	15,831,394,231	1,18952	1.02594	1.02554	1.03384	1.09082	3.33%
1989	28.74%	29.46%	41.81%	443,105	15,380,530,820	1,22172	0.96634	0.96823	0.99151	1.08156	-0.85%
1990	27.70%	32.58%	39.72%	414,457	16,776,884,245	1,25995	1.01403	1.01340	1.02084	1.10410	2.06%
1991	27.09%	31.12%	41.79%	411,167	15,965,992,971	1,29437	0.97023	0.97005	0.99305	1.09642	-0.70%
1992	27.44%	31.43%	41.13%	395,639	16,382,401,649	1,32630	0.99637	0.99530	1.00769	1.10484	0.77%
1993	25.52%	35.25%	39.23%	367,196	16,347,418,469	1,35759	1.03052	1.03050	1.02772	1.13547	2.73%
1994	23.88%	36.63%	39.69%	346,843	18,969,381,288	1,38474	0.99639	0.99689	1.00579	1.14205	0.58%
1995	23.08%	34.63%	42.29%	338,040	18,296,870,339	1,41589	0.96850	0.96855	0.99029	1.13096	-0.98%
1996	23.69%	34.65%	41.65%	338,177	18,287,867,671	1,46711	0.99987	0.99987	1.01495	1.14787	1.48%
1997	23.68%	33.04%	43.37%	338,404	17,753,487,504	1,51667	0.98292	0.98301	1.00425	1.15276	0.42%



APPENDIX B

INDUSTRY DATA

**FCC STAFF'S TFP PRODUCTIVITY MODEL**  
 (4th Report & Order, May 21, 1997, CC Docket 94 -1)  
**USTA's UPDATE for 1998**

(FCC SOCC 1998 BOC Data Tables adjusted for SNET merger for consistency)

FCC CHART D2, D3	FCC Model Data 1998	
Inter. End User Revenue S.O.C.C., Table 2.9, line 154	\$7,807,872 24.6%	← Annual change
Inter Switched Access S.O.C.C., Table 2.9, line 155	\$7,275,241 -17.0%	
Inter Special Access S.O.C.C., Table 2.9, line 156	\$4,815,249 25.0%	
<b>TOTAL INTERSTATE REVS</b>	<b>\$19,898,362</b> 5.4%	
Local Service Revenue S.O.C.C., Table 2.9, line 153	\$44,993,354 6.0%	
Intra. Toll & Access S.O.C.C., Table 2.9, l 157+174	\$11,978,176 -2.7%	
<b>TOTAL INTRASTATE REVS</b>	<b>\$56,971,530</b> 4.0%	
<b>GRAND TOT REVS (-MISC)</b>	<b>\$76,869,892</b> 4.4%	

S.O.C.C. for 1998 refers to the  
 FCC's "Preliminary Statistics of  
 Communications Common Carrier  
 dated May 28, 1999

<b>FCC STAFF'S TFP PRODUCTIVITY MODEL</b> (4th Report & Order, May 21, 1997, CC Docket 94 -1) <b>USTA's UPDATE for 1998</b>
---

( FCC SOCC 1998 BOC Data Tables adjusted for SNET merger for consistency)

FCC CHART D4, D5	FCC Model Data 1998	
Switched Acc Line -Mobile SOCC Table 2.10	136,170,133 3.6%	<- Annual change
Switched Acc Minutes SOCC Table 2.10	407,903,661 404,681,553 5.2%	<- Projection prior to Joint Board reporting <- ADD 1,865,240 for Bell Atl. - North revision
Special Acc Lines Dig+Anlog SOCC Table 2.10	31,620,187 29.2%	<- ADD 52,416 for SBC - Nevada revision, also DECREASE 2,583,895 for Bell Atl. - North revisi
Local Call Volume SOCC Table 2.10	444,538,659 2.6%	<- DECREASE 9,796,480 for Pacific, NV revisi
Intrastate DEMs	296,776,339 8.5%	<- Projection prior to Joint Board reporting
<b>FCC CHART D6</b>		
Total Employees Stat of C. C. Table 2.9, line 321	338,404 0.1%	
Total Compensation \$000 Stat of C. C. Table 2.9, line 324	\$18,128,861 3.9%	<- ADD \$207,702 for US West revision

<b>FCC STAFF'S TFP PRODUCTIVITY MODEL</b> (4th Report & Order, May 21, 1997, CC Docket 94 -1) <b>USTA's UPDATE for 1998</b>
---

( FCC SOCC 1998 BOC Data Tables adjusted for SNET merger for consistency)

FCC CHART D7	FCC Model Data 1998	
TPIS - BOY SOCC, Tab 2.7 (Ac260-2111)	\$236,896,179 4.2%	← Annual change
Unadj. Additions SOCC, Tab 2.7 (Ac260-2111)	\$18,553,791 1.6%	
TPIS - EOY SOCC, Tab 2.7 (Ac260-2111)	\$248,970,288 5.1%	
<i>Retires = BOY+Adds-EOY</i>	\$6,479,681	← calc
Depreciation Accruals SOCC Tabl 2.9, I 250+252	\$17,154,619 2.9%	

<b>FCC STAFF'S TFP PRODUCTIVITY MODEL</b> (4th Report & Order, May 21, 1997, CC Docket 94 -1) <b>USTA's UPDATE for 1998</b>
---

( FCC SOCC 1998 BOC Data Tables adjusted for SNET merger for consistency)

FCC CHART D8	FCC Model Data 1998	
Operating Expense SOCC Tabl 2.9, line 280	\$60,836,253 1.9%	← Annual change
Depreciation & Amortiz. SOCC Tabl 2.9, line 255	\$17,306,863 3.3%	
Employee Compensation Stat of C. C. Table 2.9, line 324	\$18,128,861 3.9%	← same value as on Chart D6
<i>Materials = Op.Exps.-Deprec.-Compens.</i>	\$25,400,529 -0.5%	← calc

Attachment 7:

Economic Development Tariff

## SUBJECT INDEX

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Enhanced Caller ID.....	A13	
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ESSX* ISDN Service (Obsoleted, See Section A112.) .....	A112	
ESSX* Service (Obsoleted, See Section A112.) .....	A112	
<b>(DELETED)</b>		
ESSX-1 Service .....	A111	
Establishment and Furnishing of Service .....	A2	
Establishment of Identity .....	A2	
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Explanation of Terms.....	A1	
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ISSUED: December 17, 1999  
BY: E.C. Roberts, Jr., President - KY  
Louisville, Kentucky

## A2. GENERAL REGULATIONS

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A2.4.11	Bill Format	22.0.4 (T)

## A2. GENERAL REGULATIONS

### A2.4 Payment Arrangements And Credit Allowances (Cont'd)

#### A2.4.8 Variable Term Payment Plan (Cont'd)

##### O. Renewal Options (Cont'd)

3. If the customer does not elect an additional payment period and does not request discontinuance of service, service will be continued at the monthly rate currently in effect for the one-month payment period under the terms described in 2. preceding.
4. If the expiration date for any service differs from the installed service's existing expiration date, the customer must choose a new payment period for the item (at the time of expiration) according to the terms and conditions as specified in E.3., E.4., F.3., F.4., I.2., I.3., and N.

The Company may discontinue or change any or all renewal options with approval of the appropriate regulatory authority.

##### P. Transfer Of Service

Service may be transferred to a new customer at the same location, except as prohibited in L.1.a.(5) preceding, upon prior written concurrence by the Company and payment of a transfer charge by the new customer as specified in service tariffs. The new customer will be subject to all provisions currently reflected in the service agreement.

##### Q. Failure Of Service

In the event that a failure of service is of greater than 24 hours' duration, the Company's liability will be limited to a credit adjustment of monthly billing for the time "out-of-service," prorated on a per diem basis. A 30-day month will be assumed for purpose of proration. The expiration date of the payment period remains unchanged.

#### A2.4.9 Economic Development Incentive Waivers and Discounts

##### A. General

1. The purpose of this Tariff offering is to complement and supplement the public policy of this State as set forth in the Kentucky law, KRS 154.22-010 through 154.22-100, and KRS 154.24-010 through 154.24-150 by providing incentive waivers and discounts to qualifying businesses. To the extent that in the Company's judgement the Eligible Company is not participating in good faith in the Kentucky Rural Economic Development and Kentucky Job Development Acts and utilizing the provisions of this Tariff relative to increased employment and the economic development project as provided for therein, the Company reserves the right to refuse to allow the Eligible Company to utilize the provisions of this Tariff. (N)
2. Qualification may be under Option One or Option Two of this Tariff. (N)
3. When the application for service is made, the applicant must advise the Company of their intent to receive the discounts and waivers afforded under either Option One or Option Two of this Tariff. (N)
4. Any qualifying business certifying that it is eligible for the waivers and discounts contained herein shall agree, as a condition of receiving the waivers and discounts, to provide proof satisfactory to the Company of its eligibility under Kentucky law, KRS 154.22-010 through 154.22-100, and KRS 154.24-010 through 154.24-150. If any qualifying business certifying that it is eligible to receive the waivers and discounts set forth herein is subsequently determined not to be eligible for the benefits created by Kentucky law, KRS 154.22-010 through 154.22-100 (KREDA) and KRS 154.24-010 through 154.24-150 (KJDA) as applicable for the Option chosen, that business shall not be eligible for any waiver or discount under this Tariff offering. Upon such occurrence, the business shall immediately cease to be eligible and may be required to provide deposits, pay applicable service connection/installation charges, and pay the full undiscounted tariff charges for any services received pursuant to this offering. (N)

##### B. Option One

For the purpose of Option One of this Tariff offering, "Eligible Company" as defined as such pursuant to KRS 154.22-010 (10), or any other entity engaged in manufacturing and having final approval by the Kentucky Economic Development Finance Authority (Authority) pursuant to Kentucky law and the provisions of KRS 154.22-010 through 154.22-100 (KREDA). (N)

1. For the purpose of Option One of this Tariff offering, "Qualified County" as defined as such pursuant to KRS 154.22-010 (16) and the provisions of KRS 154.22-010 through 154.22-100 (KREDA). (N)
2. For the purpose of Option One of this Tariff offering, any Eligible Company which meets the following qualifications will qualify for the discounts in this Tariff for 24 months from the date given final approval by the Authority. Examples of the requirements for an Eligible Company include (N)
  - a. a company which has submitted written evidence to the Authority indicating support for the project, and (N)
  - b. a company whose proposed project is used in manufacturing and (N)

(M)

## A2. GENERAL REGULATIONS

### A2.4 Payment Arrangements And Credit Allowances (Cont'd)

#### A2.4.9 Economic Development Incentive Waivers and Discounts (Cont'd)

##### B. Option One (Cont'd)

2. For the purpose of Option One of this Tariff offering, any Eligible Company which meets the following qualifications will qualify for the discounts in this Tariff for 24 months from the date given final approval by the Authority. Examples of the requirements for an Eligible Company include (Cont'd)

- c. a company that has a minimum project investment of \$100,000 and within 24 months of the date of final approval by the Authority will create at least fifteen new full-time jobs at the economic development project site for Kentucky residents employed by the Eligible Company and held by persons subject to the personal income tax of the Commonwealth of Kentucky.

To qualify for the provisions of this Tariff, an Eligible Company must meet all current requirements of the Kentucky Rural Economic Development Act.

3. In order to qualify under Option One of this Tariff, the Eligible Company will be required to certify that it has met the requirements of this Tariff offering as well as the requirements of Kentucky law KRS 154.22-010 through 154.22-100 (KREDA).

##### C. Option Two

1. For the purpose of Option Two of this Tariff offering, "Eligible Company" as defined as such pursuant to KRS 154.24-010 (8) and having final approval by the Kentucky Economic Development Finance Authority (Authority) pursuant to Kentucky law, and the provisions of KRS 154.24-010 through 154.24-150 (KJDA).

2. For the purpose of Option Two of this Tariff offering, any Eligible Company which meets the following qualifications will qualify for the discounts in this Tariff for 12 months from date given final approval by the Authority. Examples of the requirements for an Eligible Company include

- a. a company which is a service or technology related company that invests in new or expanded non-manufacturing, non-retail projects that provide at least 75% of their services to users located outside of Kentucky, as defined by Kentucky law KRS 154.24-010 through 154.24-150 and

- b. a company which will create within one year of the date of the final resolution authorizing the economic development project at least 25 new full-time jobs for Kentucky residents to be employed by the Eligible Company and to be held by persons subject to personal income tax of the Commonwealth of Kentucky.

- c. a company whose economic development project could reasonably and efficiently locate outside of Kentucky and, without the inducements offered by the Authority, the eligible company would likely locate outside the state.

To qualify for the provisions of this Tariff, an Eligible Company must meet all current requirements of the Kentucky Job Development Act.

3. In order to qualify under Option Two of this Tariff, the Eligible Company will be required to certify that it has met the requirements of this Tariff offering as well as the requirements of Kentucky law KRS 154.24-010 through 154.24-150 (KJDA).

##### D. Credits, waivers and discounts shall be applicable as follows:

1. Under Option One or Option Two of this Tariff, qualifying businesses will be eligible to receive the waiver of charges listed or credit for newly ordered tariffed services, other than Contract Service Arrangements, Volume and Term Agreements, Special Assembly Arrangements, local usage charges and long distance services (i.e., MTS and WATS).

- a. 100 percent waiver or credit of normal service deposits for telephone service if the business has established a satisfactory credit rating.

- b. Service connection/installation charges for applicable services (excludes inside wiring) will be waived or credited to the business' account.

- c. Monthly charges for applicable services will be eligible for a ten percent discount. The discount shall be applicable for twelve months after the service installation date.

## A2. GENERAL REGULATIONS

### A2.4 Payment Arrangements And Credit Allowances (Cont'd)

#### A2.4.10 Payment Plan For Contract Services

##### A. General

1. The regulations specified herein are applicable to specific services as indicated in each service's respective section of this Tariff. (M)
2. Services furnished under the Payment Plan for Contract Services (PPCS) are subject to all general regulations applicable to the provision of service by the Company as stated elsewhere in this Tariff except as noted herein. (M)
3. The PPCS is a payment plan which allows customers to pay fixed or variable rates for services provided over variable contractual payment periods. A specific monthly rate applies for the duration of each period. (M)  
Payment periods for services provided under a PPCS will be described in the services' specific tariff section. The following is an example of payment periods offered. (M)
  - a. Payment Plan A - payment periods may be selected from 24 months to 48 months in length. (M)
  - b. Payment Plan B - payment periods may be selected from 49 months to 72 months in length. (M)
  - c. Payment Plan C - payment periods may be selected from 73 months to 96 months in length. (M)
4. When the customer extends service beyond the longest service period offered, then rates for the longest available service period will apply. (M)
5. When the customer orders service to be provided under a PPCS arrangement, the customer must designate to the Company the payment plan and the service period desired, e.g. Payment Plan B and sixty months. (M)

##### B. Application of Rates and Charges

1. Rates stabilized under a PPCS arrangement are exempt from Company-initiated increases, however, decreases for any rate element will automatically flow through to the customer. Effective with this Tariff, customers under a PPCS arrangement will be billed the lower of their existing PPCS rates or the current PPCS rates for their service arrangement. (M)
2. When customers renew or change the length of their payment period, the rates applicable for the new period are those currently in effect at the time of the renewal or change in the length of the payment period. A service order charge will not be applicable for such renewals or changes. (M)



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**Ronald B. McCloud, Secretary**  
**Public Protection and**  
**Regulation Cabinet**

**Helen Helton**  
**Executive Director**  
**Public Service Commission**

**Paul E. Patton**  
**Governor**

November 1, 1999

To: All Parties of Record

RE: Case No. 99-434  
The Review of BellSouth Telecommunications, Inc.'s Price  
Regulation Plan

Dear Sirs and Madams:

The audit report filed into the record of this proceeding contained a typographical error on Page 98. Attached hereto are revised Pages 97-98.

If you have any questions, please call John Rogness at (502) 564-3940, Extension 229.

Sincerely,

A handwritten signature in cursive script that reads "Stephanie Bell".

Stephanie Bell  
Secretary of the Commission

WC  
Attachments



AN EQUAL OPPORTUNITY EMPLOYER M/F/D

effort to identify differences attributable to the PRP. Based upon numerous interviews, Vantage did conclude that had Kentucky not entered into a PRP, BST-KY would most certainly have been at a disadvantage in terms of discretionary capital allocation from the corporate level. Again, the actual amount of the capital difference cannot be determined because the issue is moot. However, Vantage can state with a high degree of certainty that the PRP did not in any way reduce capital coming into the state for maintenance and repair.

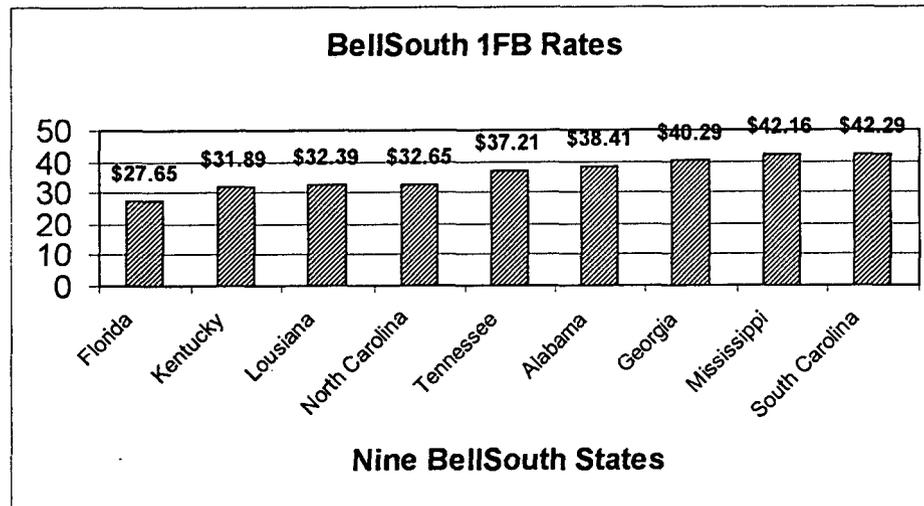
## PRICING OF SERVICES

### Regulated Services

Prices for single line business service in Kentucky is the second lowest in the BellSouth system at \$31.89. *Exhibit IV-30*, below, shows the distribution of rates across the BellSouth service territory.<sup>80</sup> As shown, the rates range from a low of \$27.65 in Florida to a high of \$42.29 in South Carolina.

### Focused Review of the Price Regulation Plan BellSouth Telecommunications, Inc. - Kentucky

Exhibit IV-30<sup>81</sup>  
BellSouth 1FB Rates



The rates shown are averages. There is a significant difference between the lowest and highest rates in the nine-state service territory, as shown below in *Exhibit IV-31*.

**Focused Review of the Price Regulation Plan  
BellSouth Telecommunications, Inc. - Kentucky**

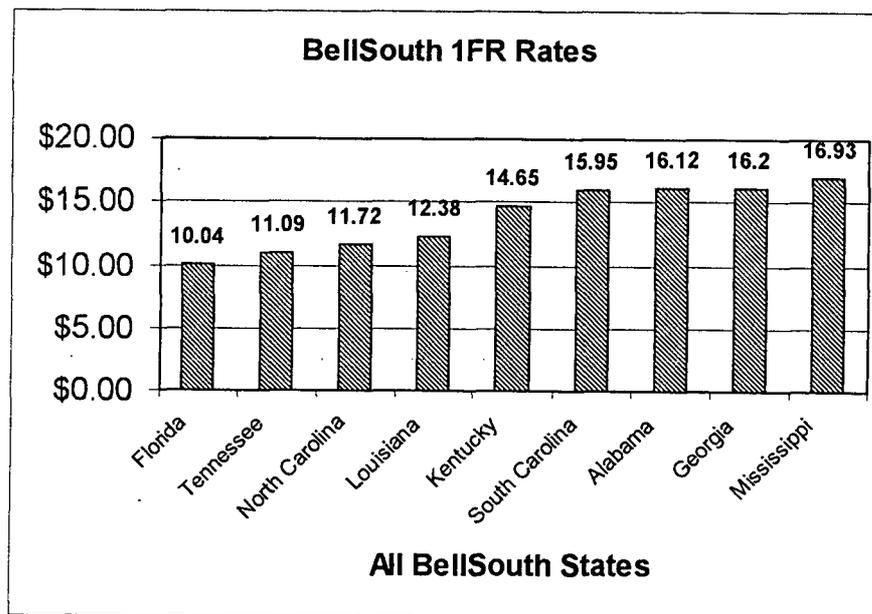
**Exhibit IV-31<sup>82</sup>  
Difference Between Highest and Lowest 1FB Rates within each State**

	AL	KY	LA	NC	FL	SC	TN	MS	GA
Difference	2.65	3.80	4.32	7.08	9.30	10.20	12.65	14.04	24.50

Rates for a single line residential customer in Kentucky are the fifth lowest in the nine-state BellSouth service territory, as shown below in *Exhibit IV-32*.

**Focused Review of the Price Regulation Plan  
BellSouth Telecommunications, Inc. - Kentucky**

**Exhibit IV-32<sup>83</sup>  
BellSouth 1FR Rates**



In looking at 1FR rates for comparative purposes, it is important to recognize that there can be considerable variation in the rates within the states. The following, *Exhibit IV-33*, shows the difference between the highest and lowest 1FR rate in each BellSouth State.

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OCT 25 1999

PUBLIC SERVICE  
COMMISSION

**Focused Management & Operations Audit**  
*of*  
**BellSouth Telecommunications, Inc.**

*For the*  
**Kentucky Public Service Commission**

OCT 25 1999

October 1999



**Vantage Consulting, Inc.**

**Focused Management & Operations Audit**  
*of*  
**BellSouth Telecommunications, Inc.**

*For the*  
**Kentucky Public Service Commission**

**October 1999**



**Vantage Consulting, Inc.**

Kentucky Public Service Commission  
Focused Review of the Price Regulation Plan  
BellSouth Telecommunications, Inc. - Kentucky

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**Kentucky Public Service Commission  
 Focused Review of the Price Regulation Plan  
 BellSouth Telecommunications, Inc. - Kentucky**

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# I. EXECUTIVE SUMMARY

## A. PROJECT OBJECTIVE

This audit was conducted in response to an Order in Docket No. 94-121, in which the Commission stated its intention to perform a focused management and operations review in the fourth year of BellSouth-Kentucky's (BST-KY) Price Regulation Plan (PRP). In Case No. 94-121 (Order) dated July 20, 1995, the Commission authorized BST to operate under a price regulation plan (PRP). The PRP was structured to satisfy five broad objectives:

- Cap BST's basic residential service rates and protect customers of BST's monopoly services from significant rate increases.
- Maintain minimum BST service quality standards.
- Provide BST with incentives to continue investing in new technologies and services to satisfy customer demands.
- Allow BST to focus its efforts on enhancing productivity and efficiency of its operations.
- Permit BST the flexibility to price competitive services.

At the time of the Order, the Commission was concerned that BST have enough regulatory flexibility to adequately prepare itself for local competition. The Commission was also concerned that certain necessary structural and operational changes be made to ensure the continued provision of high quality services to all customers and the availability of new services. Subsequent events in the telecommunications industry have shown these concerns to be appropriate.

As defined in the Order, this management audit should:

- Review BST's investment decisions, service levels, and financial performance.
- Examine BST's productivity trends.
- Assess the competitive telecommunications marketplace.
- Evaluate BST's strategic planning, network planning, marketing programs and overall operational planning under the PRP.

The specific objectives of this audit are to:

- Evaluate BST's price regulation plan in terms of whether it allows the necessary adjustments in an increasingly competitive environment.
- Determine whether the plan is structured properly going forward in view of the 1996 Telecommunications Act and certain Commission Orders.

The scope of this audit is limited to an assessment of BST's performance under the PRP and to prepare specific recommendations that either modify PRP requirements and/or address BST's management policies supporting their performance under the PRP. The objectives of the audit DO NOT include an evaluation of BST's compliance with the 1996

Telecommunications Act or related Commission Orders other than Case No. 355 and Case No. 360.

This chapter summarizes the overall results, as well as the recommendations arising from the review. Detailed findings and recommendations are presented in later chapters of this report.

## **B. AUDIT APPROACH**

### **BACKGROUND**

The audit was conducted during the period of April 1999 through October 1999, with most on-site field work and interviews completed by July 1999. In order to maintain conformity and ease of historical comparison, the data and statistics cited in the report were gathered as of year end 1998.

A total of five consultants from Vantage, plus a Project Administrator, were involved in the audit and contributed to the final report. In addition, the Kentucky Public Service Commission Management Audit Branch was involved in all aspects of the audit. Virtually all interviews were attended by a representative of the Management Audit Branch who was then able to use this knowledge in reviewing the Draft Report. The in-depth involvement of the Management Audit Branch will be of great value in the future when it is called upon to provide direction in any ongoing regulatory proceedings.

### **AUDIT STEPS**

Prior to beginning field work, BST-KY management, the Management Audit Branch, and Vantage Consulting project managers met to refine the scope of the audit and to clarify procedures for submitting interview and information requests. Field work commenced with a one-day orientation conducted by BST-KY management and initial interviews. After the orientation phase, Vantage consultants determined that the preliminary work plan submitted in the proposal accurately reflected the requirements of the project.

The on-site field work phase lasted approximately three months. Throughout this phase, Vantage consultants conducted a total of approximately 35 interviews and field visits, and submitted 140 information requests. The field visits, interviews, and information request responses formed the basis of the factual information provided in this report.

At the end of the field work, the Vantage team held a verification session with the Management Audit Branch and BST-KY management to review preliminary findings and conclusions and apprise them of progress and issues. During this meeting, consultants provided oral descriptions of the findings and conclusions reached, followed by feedback from BST-KY to better clarify positions.

After all interviews and verifications were complete, Draft Report Chapters were developed and submitted to the Management Audit Branch for review and approval. Once reviewed and approved by the Management Audit Branch, BST-KY was given 10 working days to

provide comments. After comments were received from BST-KY, a Final Draft Report was prepared for additional review and comments by both the Management Audit Branch and BST-KY. These comments were incorporated where appropriate, and the Final Report was produced.

The report is organized in the following manner in order to provide a logical presentation of the information and detail:

- *Chapter I - Executive Summary*, provides a brief synopsis of the report, as well as a listing of each recommendation made, its relative priority, and potential for quantifiable cost savings where appropriate.
- *Chapter II - History of Price Regulation Plan*, provides summaries of the PRP plans for Kentucky, other BellSouth states, and other non-BellSouth utilities across the country.
- *Chapter III - Significant Regulatory, Structural and Technical Changes*, illustrates significant technical and regulatory changes that have occurred during the period that the PRP was in place.
- *Chapter IV - BellSouth Performance During PRP Program*, contains the analysis, conclusions, and recommendations resulting from our review of BST-KY's four years of operation under the PRP. This was the *Tier 1* analysis called for under the Request for Proposal.
- *Chapter V - Assessment of PRP Structure*, is an analysis of the structure of the current PRP with recommendations for changes. This analysis includes a review of Total Factor Productivity (TFP), service categories, service category pricing formulas, evaluation of PRP objectives, and ongoing PRP objectives.
- *Chapter VI - Stakeholder Impact From PRP*, provides a general discussion of the impact PRP has and will continue to have on various stakeholders.
- *Chapter VII - Platform Towards Deregulation*, summarizes the platform of activities that need to be undertaken by BST-KY to achieve the objectives discussed in the previous chapters.
- *Chapter VIII - Appendix*, includes a glossary of terms associated with the telephone industry and PRP activities in particular.

## C. OVERALL SUMMARY

### BST-KY PRP RELATIVE TO INDUSTRY

BellSouth Telecommunications has implemented PRPs in all nine of its region states. BST-KY was the first of the states to complete the implementation. In addition, there are

numerous other telephone utilities across the country that have implemented similar plans. In comparing Kentucky to the other BellSouth states and the rest of the industry, we noted that BST-KY was the first of the BellSouth states to implement its plan and that it had the highest productivity factor of all BellSouth states and one of the highest productivity factors in the country.

There have been significant regulatory and legislative activities within the telecommunications industry since the advent of the BST-KY PRP. These include the Telecommunications Act of 1996, the FCC Interconnection Order, and Universal Service issues. In addition, major changes in the make-up of the industry have also taken place, including, convergence or the coming together of technologies necessary for provision of telecommunications services, a broadening of the number of competitors, and the addition of large numbers of CLECs. Many changes are technology driven. Along with loosening regulatory constraints, technology is allowing non-traditional competitors, such as wireless providers, voice and fax over IP providers, and cable (COAX and satellite) to begin competing directly with BST-KY.

### **A PARADIGM CHANGE MAY BE REQUIRED**

Anyone familiar with telecommunications recognizes the fundamental shifts which are occurring in technology and in market players. In our analysis of the industry, we made some key observations concerning the industry and its regulation on a going-forward basis:

- The Commission must prepare for and understand markets and services outside their direct regulatory control.
- BellSouth through its interaction with the Commission, must prepare itself for the problems that competition may bring.
- The total role of BellSouth in state economic development must be considered in any evaluation of BellSouth's performance in a state.
- The argument that competition does not exist, because of low penetration of access lines, is specious and does not recognize the realities of the modern telecommunications environment.
- The residential POTS customer with no enhanced services and little long distance usage is not likely to see any noticeable reduction in rates as a result of competition. This is both ironic and problematic in that these very customers are the ones where media attention continues to focus when discussing competition. They are also the customers that for the foreseeable future will require some form of regulatory protection.

Based on the analysis, we recommended closer work between BST-KY and the KPSC in addressing competition at the residential level and in opening greater dialogue between the KPSC and BST-KY and its competitors. We feel this is critical in order for the KPSC to adequately address issues in a highly fluid environment.

## BELLSOUTH RESULTS UNDER THE PRP

In our review of the PRP results for the last four years, we made a number of observations and reached one major conclusion. Overall, BST-KY has met all of its obligations in implementing and performing under the PRP. We found no instances where reliability suffered as a result of the PRP or where management made poor decisions with regard to financial or operating issues.

BST-KY's financial performance was outstanding during the PRP period. Revenues increased significantly, largely due to additional access lines and to increased demand for calling features by customers. Expenses, on the other hand, were carefully controlled. Decreases in staffing during the first three years of the program resulted in increased rates of return for the Company. While these returns exceeded past ROE target levels, one must recognize that they are meaningless under a PRP and, in fact, point to the success that has been achieved.

In performing our review of BST-KY's operational performance, we tried to understand the transition BST-KY and the industry is undergoing. In particular, we considered BST's business plan projections, which show the current versus projected service levels and revenues. For example, in 1998, BST-KY had 73% of the local service market with a projection that in 2002, this level would be reduced to 39%. (Almost all major commercial businesses in Louisville have alternate suppliers right now.) On the other hand, data, equipment, managed network service, and long distance revenues would all increase proportionately.

As to reliability, our review addressed all areas of operation and measures of performance and found, with few exceptions, adequate to good performance. We did make recommendations in this area. We noted that certain of the service measures required to be reported under the PRP are arcane and should be reviewed and either removed or modified.

Our review of BST-KY's strategic planning showed that it has adapted to the new telecommunications environment.

## STRUCTURE OF THE PRP

Our overall assessment of the PRP during the last four years concluded that it was effective, but now needed changes to reflect the industry transition to competition. The first and one of the major issues was the productivity factor. Our consultants conducted a study of Total Factor Productivity to determine its history, proper application, and relevance at this time in the industry transition. A major conclusion of Vantage was that the productivity factor, as currently used, should be eliminated or phased out. In developing an alternative to the productivity factor, we recommend that the KPSC should eliminate the TFP index and allow rates to be capped by inflation. Part of the recommendation provides the option of establishing a fund based upon the elimination of the TFP index over an identified transition period, for which BST-KY will be directed to earmark for future investment commitment or allocation.

Our review of the service categories suggests that there is no basis for redefining the three existing categories. However, we do recommend that BST-KY should review the services contained in the non-competitive service category, and based upon the KPSC standards, submit a petition to the KPSC for their re-classification to the competitive category.

Our review of service category pricing formulas indicated that BST-KY has not filed any tariffs or entered into any CSAs which have requested prices below LRIC, and that BST-KY has appropriately utilized CSAs.

Another issue related to tariffs that we addressed was presumptive validity, which is a concept that while not a problem to date, could become one in the future. Here we recommend that the PRP regulations allow for a reasonable level of presumptive validity.

In our review of the PRP objectives, we conclude that the original set of objectives be continued, but that two additional objectives be added. These include permitting all BST-KY retail rates to move towards incremental cost or market price, and ensuring that the potential introduction of competition to all markets in Kentucky is not hindered by the PRP.

### **OBJECTIVES GOING FORWARD**

Our last audit chapter provides a platform of activities to be undertaken by the BST-KY and the KPSC to insure that competitive objectives are forwarded, not hindered by the PRP. Here we conclude that the Kentucky state-wide wholesale UNE price structure, in conjunction with BST-KY's subsidy laden retail rate structure, inhibits the successful transition to a deregulated telecommunications marketplace. We recommend a focused effort to eliminate implicit/explicit subsidies from BST-KY's retail rates. We also recommend that the issues of rate re-balancing be reassessed by BST-KY and the KPSC and that together with other involved parties, an effort be made to move forward with a limited rate re-balancing.

## **D. SUMMARY OF RECOMMENDATIONS**

The following summary of recommendations provides key information in each of the columns. Column one provides the recommendation number. The roman numeral refers to the chapter of the report, and the number is the sequential number of the recommendation in the chapter. The second column provides the recommendation description, taken directly from the report, and the reference to the specific finding(s) that supports the recommendation. Column three provides a priority for the recommendation. This is the consultant's judgment as to which recommendations the initial effort should address. High, medium, and low are used to differentiate between recommendations. Notwithstanding these priorities, all recommendations are considered important. Column four provides an assessment of the quantification potential, or likely savings, to be generated from the recommendation. Most recommendations address improved customer service operations or strategic position, but are not readily quantifiable. Although additional savings may be possible as a result of implementing some of these strategic and operations types of recommendations, an estimate of their cost effectiveness cannot be made at this time because of the difficulty in arriving at such values.

## SUMMARY OF RECOMMENDATIONS WITH PRIORITIES

Recommendation Number	Recommendation Description	Priority
III-R1	The Commission needs to develop a formal plan for how it plans to deal with competition at the residential level.	Medium
III-R2	The Commission needs more open dialog with BellSouth and other competitors.	Medium
IV-R1	The Out of Service repair service standard should be changed to 36 hours from 24 hours.	Medium
IV-R2	Service standards should be revised to include only those measures providing valuable data in today's environment.	Medium
IV-R3	The Commission should be prepared to revisit the remaining service standards after the industry has "resetled."	Low
V-R1	The KPSC should eliminate the TFP index.	High
V-R2	Change the non-competitive service category pricing formula to allow for price increases at inflation.	High
V-R3	BST-KY should review the services contained in the non-competitive service category and, based upon the KPSC standards, submit a petition to the KPSC for their re-classification to the competitive category.	High
V-R4	Change the PRP regulations to allow for a reasonable level of presumptive validity.	Low
V-R5	The KPSC should maintain the five current objectives of the PRP. However, two new objectives should be added.	Medium

VII-R1	The BST-KY should work with the KPSC to undertake several proceedings with the aim of eliminating implicit/explicit subsidies from BST-KY's retail rates, establishing de-averaged recurring UNEs and modifying non-recurring UNEs.	High
VII-R2	Vantage recommends that the issues of rate re-balancing be reassessed by BST-KY and the KPSC and, that together with other involved parties, an effort be made to move forward with a limited rate re-balancing.	Medium

## II. HISTORY OF PRICE REGULATION PLAN

### A. SUMMARY OF KENTUCKY PRP

*Exhibit II-1* provides a summary of the BST-KY PRP and *Exhibit II-2* shows other BST States PRP. These summaries are intended to provide a general overview for the reader. For specific details, please refer to the actual order or BST's annual filings.

**Focused Review of the Price Regulation Plan  
BellSouth Telecommunications, Inc. - Kentucky**

**Exhibit II-1  
BST-KY PRP Summary**

	<b>BST-KY Summary</b>
<b>Proceeding/Status</b>	BST-KY proposed price regulation plan 3/94. Hearings conducted in price regulation docket 4/95. Order issued 7/20/95 adopting price regulation plan with modifications.
<b>Initial Term/Renewal/Review</b>	No term limit. By 7/20/99, BST-KY is required to file analysis of productivity results over the four-year period and projections for any changes in factors of productivity in the future. Management audit will be conducted in the fourth year after the date of the Order. Audit shall include review of investment decisions, service levels, and financial performance under price regulation to determine if adequate service has been maintained.
<b>Inflation Index</b>	GDP-PI.
<b>Inflation Formula Including Any Productivity Offsets/Inflation Thresholds</b>	GDP-PI minus 4% when inflation $\leq 8\%$ 1/2 GDP-PI when inflation $> 8\%$ Applies to Non-competitive services and to Interconnection services.
<b>Rate Caps</b>	3-year cap on Residence and until USF established.
<b>Rate Case</b>	Prices were adjusted based on 12.5% ROE resulting in \$28.9 million reduction.
<b>Rate Reductions</b>	Touch-Tone: \$3.7M Access Charges: \$9.2M Toll: \$1.3M Zone: \$8.8M Grouping: \$5.9M \$28.9M

<b>Service Category Descriptions</b>	Non-competitive: Residence and business basic local exchange service plus some discretionary services. Interconnection: Access services typically of a wholesale nature and not usually sold to end users. Competitive: All other services.						
<b>Basic/Non-Competitive Service Category Pricing Rules</b>	3-year cap on residence and continued until viable and acceptable universal service fund is implemented. <table border="0"> <tr> <td><u>Inflation</u></td> <td><u>Productivity</u></td> </tr> <tr> <td>0-8%</td> <td>4%</td> </tr> <tr> <td>&gt;8%</td> <td>1/2 GDP-PI</td> </tr> </table> <ul style="list-style-type: none"> <li>• Allowed price increase cannot exceed PRI change annually.</li> <li>• Increases cannot be deferred &amp; can be taken any time during the year.</li> <li>• Required decreases must be implemented upon PRI change.</li> <li>• 10% increase limit on individual services.</li> </ul>	<u>Inflation</u>	<u>Productivity</u>	0-8%	4%	>8%	1/2 GDP-PI
<u>Inflation</u>	<u>Productivity</u>						
0-8%	4%						
>8%	1/2 GDP-PI						
<b>Interconnection Category Pricing Rules</b>	Mirror interstate switched access rates effective 7/1/95 and on continuing basis. Adjust based on non-competitive rules.  Rates for all intrastate switched access services cannot exceed the FCC interstate rate for the same service. If there is no similar service in interstate arena, the pricing rules in the non-competitive category will apply. Rates effective upon 30 days notice.						
<b>Non-Basic/Competitive Category Pricing Rules</b>	Company sets prices based on market factors. Cost studies required for all price changes in competitive category. Changes are effective upon 30 days notice.						
<b>Service Reclassification Requirements</b>	Company to file notice to reclassify service. Reclassification is presumed valid within 30 days if no action taken by Commission. If suspended, Commission will complete review procedures within 90 days.						
<b>New Service Definition and Rules</b>	New service is function, feature, capability or combination of these previously not offered. BST-KY will propose appropriate category. Service will be effective upon 30 days notice.  Commission retains full statutory suspension procedures if new service is contested.						
<b>Tariff Requirements</b>	Company will continue to file tariffs for all services. Tariff filings will include information to comply with pricing rules. BST must file cost study with any proposed change to demonstrate that the price is above long run incremental costs.						
<b>Customer Notification</b>	Company determined; will comply with existing law.						
<b>Price Changes Due to Governmental Action</b>	Not included in Order.						

<b>Financial Reporting</b>	Company shall file routine quarterly and annual financial reports. Company may produce income statements in accordance with GAAP, but should maintain current USOA accounts and structure. BST-KY will file biennial review of its progress toward objectives, including a customer satisfaction analysis and technology assessment.
<b>Depreciation</b>	BST-KY shall set its own depreciation rates. Company shall file copies of its FCC depreciation filings. The Commission will monitor depreciation decisions and interact with FCC to assure assets are depreciated in timely manner.
<b>Service Quality Requirements</b>	Company will provide monthly reports of Commission required measurements as well as EXCEL results. BST-KY's summary of monthly service objectives should identify exchanges that do not meet minimum service standard for any month. If performance levels for an exchange fall below the minimum service objectives for two consecutive months, BST-KY should submit report setting forth the specific action taken or planned to correct its performance.
<b>Infrastructure Requirements</b>	No additional infrastructure requirements included.
<b>Commission Authority</b>	Price regulation is an agreement between Commission and Company to set and adjust prices based on proposed rules rather than based on earnings. Commission retains authority as set forth in rules and statutes.
<b>Competitive Safeguards Examples:</b>  <b>Cost Allocation</b> <b>Cross Subsidy</b> <b>Imputation</b> <b>Price Floors</b>	<p>Rates for Interconnection and Non-basic services shall equal or exceed LRIC unless price is intended in good faith to meet equally low price of a competitor. In such exceptions, the Company must file cost study and evidence to support that competitor is already charging a rate below the Company's LRIC of providing the service.</p> <p>Imputation Standard: Requires that each rate band by time-of-day for calls of average distance and duration exceed the traffic sensitive switched access rate plus the rate for billing and collection. (Imputation rule established by previous Commission Order.)</p>

## B. SUMMARY OF OTHER BELLSOUTH STATES PRP

### Focused Review of the Price Regulation Plan BellSouth Telecommunications, Inc. - Kentucky

#### Exhibit II-2 Other BST States PRP Summary

	ALABAMA
<b>Proceeding/Status</b>	Plan filed 2/2/95. Industry stipulation filed 5/17/95 recommending price regulation and certain local competition rules. Enabling legislation enacted 6/20/95. Commission issued order adopting modified Stipulation effective 9/20/95.
<b>Initial Term/Renewal/Review</b>	No term limit. Review of price regulation/local competition procedures and impact on rate payers no later than third anniversary date (9/20/98). On 10/5/98, Commission postponed review for up to three years.
<b>Inflation Index</b>	GDP-PI.
<b>Inflation Formula Including Any Productivity Offsets/Inflation Thresholds</b>	Efficiency factor of 3.0%. GDP-PI - 3.0% minus any service quality penalties.  Formula applied to Basic Category.
<b>Rate Caps</b>	5-year cap on Basic Category. Individual residential service prices cannot be increased by more than the adjusted GDP-PI (GDP-PI minus 3.0% minus service quality penalties). Intrastate switched access rate elements capped at interstate switched access rates. One year cap on all services.
<b>Rate Case</b>	Rates in effect on 7/1/95 after most recent Point-Of-Test and rate reductions outlined below will be starting rates under the plan.
<b>Rate Reductions</b>	Reduce intrastate switched access to 8/1/95 interstate levels, plus an additional reduction of one cent. Reduce switched access 1/2 cent on 7/1/96 and 7/1/97 and 1/4 cent on 7/1/98 and 7/1/99 for two ends of access. Other rate reductions include: 7/1/95 - \$10.2M Touch-Tone 7/1/96 - \$15.3M Res. & Bus. Regrouping 7/1/97 - \$10.1M ACS, Grouping, Bus. 7/1/98 - \$11M MTS, ACS, Res. 7/1/99 - \$11M MTS, ACS, Bus.

<b>Service Category Descriptions</b>	Basic: Residence & Business local exchange services including ACS. Interconnection: Switched access and local interconnection. Non-Basic: All services other than Basic and Interconnection.
<b>Basic Service Category Pricing Rules</b>	5-year cap on all Basic services. Thereafter, increases limited in the aggregate to the change in GDP-PI, less a 3.0% efficiency factor, less any penalties related to service quality standards. Individual residential service price increases limited to the change in GDP-PI minus 3.0% minus any service quality penalties.
<b>Interconnection Category Pricing Rules</b>	For the first 5 years of the plan, switched access rates are tied to stipulated reductions (see Rate Reductions above). After 5 years, the rates are further capped at the 1999 intrastate rate levels or the interstate levels, whichever is the lowest. Local interconnection charges will be developed through a workshop conducted by the PSC.
<b>Non-Basic or Other Category Pricing Rules</b>	The aggregate prices for all services can increase a maximum of 10% in a given year. No increases in the first 12 months of the plan.
<b>Service Reclassification Requirements</b>	Transfer of service between categories effective no less than 30 days from filing.
<b>New Service Definition and Rules</b>	New services effective on 30 days notice even with intervention or investigation by Commission. If no decision after 60 days following filing, tariff is effective on a continuing basis. Period can be extended by the Commission either on its own motion or at the request of an interested party for a period not to exceed 60 days, for a total of 120 days.
<b>Tariff Requirements</b>	Company will continue to file tariffs for all services unless otherwise de-tariffed. Price decreases and promotional offerings effective no less than 15 days from filing. Tariffs to expand list of CSA authorized services effective 30 days after filing. Filings for decreases, promotional offerings or expansion of CSA approved list may be suspended to a 60-day effective date. Price increases effective on 30 days notice, but Commission can extend to 60 days.
<b>Customer Notification</b>	Company determined; will comply with existing law.
<b>Price Changes Due to Governmental Action</b>	The financial impact of governmental mandates, both state and federal, which apply specifically and/or disproportionately to, and have a major impact on telecommunications companies, may be recovered through an adjustment to prices for Basic, Interconnection and/or Non-basic services. Major impact is one which exceeds 2% of total intrastate regulated revenues in the preceding calendar year.

<b>Financial Reporting</b>	Company will provide Commission with financial results in the form of a monthly Alabama income statement. Other financial reports will be provided, as required by the Commission.
<b>Depreciation</b>	Commission approval not required for BST depreciation rates.
<b>Service Quality Requirements</b>	Four service quality standards will be used to adjust the efficiency factor: Latest 12 months' calculations for: 1) Overall trouble report rates, 2) Trouble report rates for individual wire centers, 3) Held applications, 4) Receipt-to-final status in 36 hours. Each standard missed increases efficiency factor by 0.2%. If all four missed, maximum impact increases efficiency factor to 3.8%. Service quality standards reported monthly.
<b>Infrastructure Requirements</b>	No specific requirements, but the Commission will conduct a workshop on new technologies and expanded services. All local providers are required to develop networks and capabilities to support emerging technology, multimedia services, expanded services and the benefits of the "information super highway" in both urban and rural areas.
<b>Commission Authority</b>	Price regulation in no way diminishes the Commission's right or responsibility to regulate BST and oversee its operations. Prices charged to customers become the financial focus of the Commission rather than the earnings of BST.
<b>Competitive Safeguards Examples:</b>  <b>Cost Allocation</b> <b>Cross Subsidy</b> <b>Imputation</b> <b>Price Floors</b>	Prices for any new or existing service shall equal or exceed LRIC unless specifically exempted by the Commission based on public interest concerns, or BST, in good faith, prices the service to meet the equally low price of a competitor.  Imputation Standard: The price floor for each service shall equal the total LRIC of the non-essential elements of the service plus the LEC's tariffed rates for essential elements utilized by the competing providers.

	<b>FLORIDA</b>
<b>Proceeding/Status</b>	Legislation opening local franchise and establishing price regulation framework enacted 6/17/95, effective 7/1/95. BST's election of price regulation became effective 1/1/96. BST is required to comply with the 1/94 stipulation terms including earnings sharing.
<b>Initial Term/Renewal/Review</b>	No term limit. Statute specifies certain reports that Commission and OPC must provide to legislature regarding the development of competition and results of alternative framework.

<b>Inflation Index</b>	GDP-PI.
<b>Inflation Formula Including Any Productivity Offsets/Inflation Thresholds</b>	Basic: Inflation minus 1%. Network Access: Inflation not to exceed 3%.
<b>Rate Caps</b>	5-year cap (until 1/1/2001) on Basic services for LECs with more than 3 million lines. 3-year cap (until 1/1/99) on Basic services for other LECs. 3-year cap on multi-line business, PBX, Centrex, hunting. 3-year cap on Network Access Svs.
<b>Rate Case</b>	Rates in effect on 7/1/95 were used to initiate the plan.
<b>Rate Reductions</b>	Reduce switched access by 5% each October beginning 10/1/96 until at parity with 1994 interstate rates.
<b>Service Category Descriptions</b>	Basic: Flat rate residence and single line business; end user access to certain services.  Local Interconnection: Not defined.  Network Access: Access to local network.  Non-basic: All services other than Basic, Local Interconnection and Network Access.
<b>Basic Service Category Pricing Rules</b>	Basic services capped until 1/1/2001 for LECs with more than 3 million access lines. Thereafter, may be adjusted by inflation minus 1%.
<b>Interconnection Category Pricing Rules</b>	Reduce switched access by 5% annually until at parity with 1994 interstate rates. Thereafter, adjust by inflation not to exceed 3% annually. All other Network Access is capped for three years and then adjusted by inflation never to exceed 3% annually. Local Interconnection rates are negotiated between parties or established by Commission if unable to negotiate.
<b>Non-Basic or Other Category Pricing Rules</b>	Price increases for Non-Basic categories may not exceed 6% annually until there is an alternate local provider in the exchange, at which time price increases may not exceed 20% annually.  3-year cap on multi-line business, PBX, NARS, hunting.
<b>Service Reclassification Requirements</b>	LEC can petition for removal of regulation if circumstances warrant.

<b>New Service Definition and Rules</b>	Not addressed in legislation.
<b>Tariff Requirements</b>	Tariff requirements for Basic services are not specified in statute other than LEC may adjust prices on 30 days notice once in any 12-month period. LEC will continue to file tariffs for Network Access and Non-basic services. LEC may change prices for Non-basic services on 15 days notice. LEC may increase rates upon 30-days notice and decrease upon 7 days notice for Network Access services. Changes to terms and conditions for Network Access services are presumed approved on 15 days notice.
<b>Customer Notification</b>	Not addressed in legislation.
<b>Price Changes Due to Governmental Action</b>	LEC can petition for increase to Basic rates if circumstances change, but cannot recover costs of distance learning network specified in bill unless associated with COLR. LEC can petition for cost recovery through access charges of government mandates or increase in federal or state income tax. A company shall decrease Network Access rates to reflect decreases in federal or state income tax.
<b>Financial Reporting</b>	Not specified in legislation.
<b>Depreciation</b>	Company shall not be required to seek approval of depreciation rates. However, depreciation rates effective 12/31/94 will be used in calculating earnings available for sharing for BST through 12/31/97.
<b>Service Quality Requirements</b>	Commission to maintain oversight of service quality.
<b>Infrastructure Requirements</b>	State Education Technology Committee established to develop a needs assessment report describing the overall advanced telecommunications services needed for education, libraries, video conferencing, hospitals & access to Internet. Report to be filed w/Governor, House & Senate by 3/1/96, describing advanced telecommunications services to be delivered by 1/1/99. Eligible facilities (schools, univ., hospitals, libraries, etc.) must submit technology needs requests by 7/1/97 to the Department of Management. If no competitive bids received to provide services, the carrier of last resort (COLR) shall provide the advanced telecommunications services. Penalties apply if the entity awarded the bid or the COLR does not perform as specified in contract.

<b>Commission Authority</b>	Pricing rules are specified in statute. Considerable authority is provided to Commission to resolve interconnection, resale, price change disputes.
<b>Competitive Safeguards</b> <b>Examples:</b>  <b>Cost Allocation</b> <b>Cross Subsidy</b> <b>Imputation</b> <b>Price Floors</b>	<p>Price for Non-basic service shall cover the direct costs of providing the service and shall, to the extent a cost is not included in the direct cost, include as an imputed cost the price charged to the competitor for the monopoly component used by competitor in the provision of its same or functionally equivalent service.</p> <p>Imputation Standard: Legislation requires imputation of originating and terminating switched access on a conversation minute of use basis for MTS, WATS and 800 Service. For high volume toll services there is a crossover formula that will allow for imputation of one end of switched access plus one end of special access.</p>

	<b>GEORGIA</b>
<b>Proceeding/Status</b>	Senate Bill 137 opening local franchise and establishing price regulation framework enacted 4/19/95. Effective 7/1/95. BST's Notice of election of price regulation was effective 8/5/95.
<b>Initial Term/Renewal/Review</b>	No term limit.
<b>Inflation Index</b>	GDP-PI.
<b>Inflation Formula Including Any Productivity Offsets/Inflation Thresholds</b>	Annual adjustment not to exceed the greater of 1/2 change in GDP-PI when GDP-PI >3% or GDP-PI minus 2%.
<b>Rate Caps</b>	5-year cap on Basic Services.
<b>Rate Case</b>	Rates in effect upon election became starting rates under the plan.

<b>Rate Reductions</b>	<p>Reduce switched access rates to parity with interstate. Intrastate rates can be no higher than interstate. The rates for switched access shall be negotiated in good faith between the parties.</p> <p>On 12/19/95 Commission approved further reduction in switched access effective 7/1/96. Reduction of \$9.7 million (to \$0.035 per minute) resolved AT&amp;T petition to reduce switched access rates.</p>
<b>Service Category Descriptions</b>	<p>Basic: Residence and single-line business, Touch-Tone.</p> <p>Other: All services other than Basic.</p>
<b>Basic Service Category Pricing Rules</b>	5-year cap on Basic rates. Subsequent increases tied to inflation formula.
<b>Interconnection Category Pricing Rules</b>	No separate category for interconnection services. Included in Other Services Category. See Rate Reductions above.
<b>Non-Basic or Other Category Pricing Rules</b>	LEC can set rates for all other local exchange services on a basis that does not unreasonably discriminate between similarly situated customers; provided that rates are subject to a complaint process for abuse of market position in accordance with rules to be established by the Commission.
<b>Service Reclassification Requirements</b>	Not addressed in legislation.
<b>New Service Definition and Rules</b>	Not addressed in legislation.
<b>Tariff Requirements</b>	Tariffs required for all services. Interim tariff filing requirements ordered on 6/8/95. Tariff filings will be presumed valid and become effective 30 days after filing, unless suspended, revised or denied by Commission. Tariffs for new service or rate decreases must include a numerical demonstration that the prices are above total service long-run incremental costs.
<b>Customer Notification</b>	Not addressed in legislation.
<b>Price Changes Due to Governmental Action</b>	Not addressed in legislation.
<b>Financial Reporting</b>	Required to file quarterly reports on infrastructure commitment.
<b>Depreciation</b>	Company shall not be required to seek approval for its depreciation rates.

<b>Service Quality Requirements</b>	The Commission is authorized to adopt reasonable rules governing service quality.
<b>Infrastructure Requirements</b>	Electing company with 2 million access lines is required to commit \$500M annually for 5-years toward infrastructure. PSC to review after 3-years to reduce commitment or continue.
<b>Commission Authority</b>	Includes the authority among other things to: <ul style="list-style-type: none"> <li>- adopt rules governing certification</li> <li>- establish and administer a Universal Access Fund</li> <li>- adopt service quality rules</li> <li>- resolve LEC service complaints</li> <li>- approve and, if necessary, revise, suspend or deny tariffs</li> <li>- establish rules and methodologies for cost allocation</li> <li>- enable number portability.</li> </ul>
<b>Competitive Safeguards Examples:</b>  <b>Cost Allocation</b> <b>Cross Subsidy</b> <b>Imputation</b> <b>Price Floors</b>	LECs are prohibited from engaging in anti-competitive acts including price squeezes, price discrimination, predatory pricing or tying arrangements. Commission is authorized to establish reasonable rules and methodologies for performing cost allocations among a company's services.  Imputation Standard: Requires imputation of originating and terminating switched access on a conversation minute of use basis for MTS, WATS and 800 Service. For high volume toll services, there is a crossover formula that will allow for imputation of one end of switched access plus one end of special access. Imputation standard established in previous Commission Order.

	<b>LOUISIANA</b>
<b>Proceeding/Status</b>	On 3/5/96, the Commission adopted a stipulation and settlement agreement that closed an earnings investigation, adopted local competition rules, terminated a proceeding investigating reengineering costs and benefits and adopted a price regulation plan. The effective date of price regulation is 4/1/96.
<b>Initial Term/Renewal/Review</b>	6-year term. Formal reviews scheduled after the third year and during the sixth year of the plan.  Commission issued Order on 4/13/99 completing three-year review. Order extends the cap on Interconnection category for two additional years (subject to hearings). Order also

	noted 1) current rates are just and reasonable, 2) no changes in service quality measurements are required 3) LPSC will continue to focus on benefits of competition, and 4) provision of service to Mink and Shaw/Blackhawk communities to be evaluated in Universal Service Dkt.
<b>Inflation Index</b>	GDP-PI.
<b>Inflation Formula Including Any Productivity Offsets/Inflation Thresholds</b>	GDP-PI minus 2.5% for Basic Services category.
<b>Rate Caps</b>	5-year cap on Basic Services category.  3-year cap on Interconnection Services category.
<b>Rate Case</b>	Settled per terms of stipulation and settlement agreement.
<b>Rate Reductions</b>	\$9.0M one-time credit to residence and business customers. \$70M in rate reductions as follows (specific services to be determined): 4/1/96           \$23.4M 4/1/97           \$23.3M 4/1/98           \$23.3M
<b>Service Category Descriptions</b>	Basic: Residence and single line business basic local exchange services.  Interconnection: Services that allow a provider to interconnect with networks of other providers.  Non-Basic: All other services.
<b>Basic/Non-Competitive Service Category Pricing Rules</b>	5-year cap on Basic Category; thereafter, adjust based on change in GDP-PI minus 2.5%. Individual service may not increase more than 10% in a twelve-month period.
<b>Interconnection Category Pricing Rules</b>	3-year cap on individual services in Interconnection Services category. After the cap expires, individual services may not increase more than 10% in any twelve-month period.
<b>Non-Basic/Competitive Category Pricing Rules</b>	Individual service may not increase more than 20% in twelve-month period.
<b>Service Reclassification Requirements</b>	Service category classification report to be filed each July 1. Proposals for reclassification are to be included.

<b>New Service Definition and Rules</b>	New service is a service function, feature or capability, or combination of these, not offered as of 3/31/96. Service may be effective on 10 days notice. Affected party may intervene, but intervention will not delay effective date if tariff is accepted by Staff.
<b>Tariff Requirements</b>	Company will continue to file tariffs for all services. Tariff changes may be effective on 10 days notice. Affected party may intervene, but intervention will not delay effective date if tariff is accepted by Staff.
<b>Customer Notification</b>	Procedures in effect will continue under price regulation.
<b>Price Changes Due to Governmental Action</b>	Not addressed.
<b>Financial Reporting</b>	Selected financial data on intrastate Company basis to be filed on a semi-annual basis.
<b>Depreciation</b>	Company is not required to seek regulatory approval for its depreciation rates. Rate increases based on increased depreciation expenses are prohibited.
<b>Service Quality Requirements</b>	Company will continue to provide service quality measures currently monitored under earnings sharing plan.
<b>Infrastructure Requirements</b>	Not addressed.
<b>Commission Authority</b>	Unchanged.
<b>Competitive Safeguards Examples:</b>  <b>Cost Allocation</b> <b>Cross Subsidy</b> <b>Imputation</b> <b>Price Floors</b>	Price floor of TELRIC for all services unless exempted by Commission or unless Company, in good faith, prices a service below TELRIC to meet equally low price of a competitor (subject to any imputation requirements).  Imputation Standard: Requires imputation of originating and terminating switched access on a conversation minute of use basis for MTS, WATS and OCP. Added to switched access charge are non-access costs, direct costs and facility costs. No imputation requirements in the expanded area. (Imputation rules established by previous Commission Order.)

<b>MISSISSIPPI</b>	
<b>Proceeding/Status</b>	Commission issued Order on 11/1/95 approving price regulation ("PREP") as stipulated to by BST and MPSC Staff. PREP effective 1/1/96.
<b>Initial Term/Renewal/Review</b>	Plan to be effective 1/1/96 through 12/31/01. Formal reviews scheduled at 1/1/99 to determine if modifications should be made and 7/1/01 to determine if plan should be continued, modified or discontinued.
<b>Inflation Index</b>	N/A.
<b>Inflation Formula Including Any Productivity Offsets/Inflation Thresholds</b>	After 3-year cap, beginning 3/1/99, PREP requires Basic revenues to decrease 1% per year through end of plan.
<b>Rate Caps</b>	3 year cap on Basic category
<b>Rate Case</b>	Not required
<b>Rate Reductions</b>	Rate reductions total \$33.62M over six years. Reduce switched access to interstate level as of 1/1/96 and cap at parity over life of plan. Eliminate Touch-Tone over 3 years and Subscriber Line Charge over 4 years. Reduce zone mileage charges over life of the plan. Rate regrouping will be permitted on an annual basis irrespective of the 3 year cap.
<b>Service Category Descriptions</b>	Basic: Residence and business basic local exchange services. Interconnection: Access to local and toll network. Other: All other services.
<b>Basic/Non-Competitive Service Category Pricing Rules</b>	3 year cap on all Basic services; reduce Basic revenues thereafter by 1% per year beginning 3/1/99.
<b>Interconnection Category Pricing Rules</b>	Reduce intrastate switched access rates to parity with interstate on 1/1/96 and cap at parity. All other rates set by the company according to market factors. Only one rate increase per rate element per year.

<b>Non-Basic/Competitive Category Pricing Rules</b>	Company sets prices based on market factors. Individual rate elements cannot increase more than 20% annually. Only one increase per rate element per year.
<b>Service Reclassification Requirements</b>	Company to file notice to reclassify service. PSC shall review request within 30 days. If PSC neither approves nor suspends request, the reclassification is deemed approved. If PSC suspends the request, PSC review to be completed in 120 days. If PSC takes no action within 120 days, reclassification is implemented.
<b>New Service Definition and Rules</b>	New service is function, feature or capability not currently offered. New services assigned to the appropriate category. Service will become effective upon 30 days notice.
<b>Tariff Requirements</b>	Company will continue to file tariffs for all services. Tariff filings will include information to conform to pricing rules. Detailed information concerning the cost of the service shall be provided upon request of the Commission or the MPUS.
<b>Customer Notification</b>	Company determined; will comply with existing law.
<b>Price Changes Due to Governmental Action</b>	Financial impact of governmental mandates both state and federal applying specifically and/or disproportionately to and having a major impact (+/-) on telecommunications companies, may be adjusted through a change in Basic service category rates. The Company may request the Commission to adjust those rates. Major impact is one which exceeds 2% of Basic service category revenues from prior year.
<b>Financial Reporting</b>	Company shall provide Commission and Public Utilities Staff with quarterly and annual income statements and additional reports or data upon request of the Commission or MPUS.
<b>Depreciation</b>	The Company shall set its own depreciation rates under price regulation with quarterly reports to the Commission. In setting initial rates for interconnection or in setting rates for resale of local service and in establishing the initial cost of local service under a universal service fund, the depreciation rates in effect prior to the effective date of PREP will be used.

<b>Service Quality Requirements</b>	Three performance indicators will be used to monitor service quality; consumer and small business customer satisfaction, network trouble report rate, and troubles cleared at 36 hours. Penalties could reduce Basic category revenues equal to .2% for customer satisfaction, .1% for trouble report rate and .1% for troubles cleared at 36 hours, should objectives not be attained.
<b>Infrastructure Requirements</b>	None.
<b>Commission Authority</b>	The Commission will continue to review tariff filings and maintain oversight of service quality. Service quality beyond that measured and penalized or other significant adverse impacts not in the public interest are grounds to initiate a proceeding to address such concerns.
<b>Competitive Safeguards</b>  <b>Examples:</b>  <b>Cost Allocation</b> <b>Cross Subsidy</b> <b>Imputation</b> <b>Price Floors</b>	Rates for new and existing services shall equal or exceed LRIC unless price is intended in good faith to meet equally low price of a competitor, or specifically exempted by Commission based on public interest concerns, or special promotions are offered not to exceed 180 days.  Imputation Standard: Retail services shall be priced such that price is sufficient to recover the contribution that company earns from access or interconnection services plus its own incremental cost of supplying the retail service.

<b>NORTH CAROLINA</b>	
<b>Proceeding/Status</b>	HB 161 passed by Legislature 4/5/95 and effective 7/1/95 opens local franchise and requires Commission to adopt alternative regulation with no earnings regulation. BellSouth filed price regulation plan on 10/4/95. Stipulation reached with Public Staff on 1/17/96. NCUC approved plan with modifications effective 6/24/96.
<b>Initial Term/Renewal/Review</b>	No term limit. Review in advance of 5 years from effective date.
<b>Inflation Index</b>	GDP-PI.

<b>Inflation Formula Including Any Productivity Offsets/Inflation Thresholds</b>	Basic: GDP-PI - 2%. Interconnection: GDP-PI - 3%. Non-Basic 1: GDP-PI - 3%.
<b>Rate Caps</b>	3-year cap on Residence service. Indefinite cap on Toll Switched Access.
<b>Rate Case</b>	Not proposed.
<b>Rate Reductions</b>	Stipulation proposes \$60 million reduction by 3rd anniversary, \$15M when effective and at each anniversary. Eliminate Touch-Tone by 1st anniversary of the Plan and eliminate Originating CCLC by the 2nd anniversary of the Plan. Remaining rate reductions applied to toll switched access services.
<b>Service Categories Descriptions</b>	Basic: Residence and Business basic local service. Toll Switched Access: Intrastate Switched Access. Interconnection: All Access services except Toll Switched Access. Non-Basic 1: All services not included in other categories. Non-Basic 2: Centrex, B&C Services.
<b>Basic Service Category Pricing Rules</b>	Business prices, and Residence after the 3-year cap, can be adjusted in the aggregate by GDP-PI minus 2%. Rate element increases limited to one increase annually, not to exceed GDP-PI plus 3%.
<b>Interconnection Category Pricing Rules</b>	Prices can be adjusted in the aggregate by GDP-PI minus 3%. Rate element increases limited to one increase annually, not to exceed GDP-PI plus 7%.  Switched Toll Access is a separate category. In the aggregate, prices are capped at the prices in effect after the ordered rate reductions. (OCCL to be eliminated by 2nd anniversary of the plan)
<b>Non-Basic Category Pricing Rules</b>	Prices in the Non-Basic 1 Category, can be adjusted in the aggregate by GDP-PI minus 3%. Rate element increases limited to one increase annually, not to exceed GDP-PI plus 17%. No price change limits for Non -Basic 2 Category services.

<b>Service Reclassification Requirements</b>	Stipulation includes procedures for classification of new services and reclassification of existing services.
<b>New Service Definition and Rules</b>	A regulated function, feature, capability or combination of these that is not offered by BST as of the effective date of the Plan. Tariffs establishing terms, conditions and rates for new services are presumed valid and effective 14 days after filing unless suspended by Commission (not to exceed 45 days).
<b>Tariff Requirements</b>	Tariffs will be filed for all services in the five categories. Tariffs that change terms and conditions, increase rates, restructure rates or introduce a new service are presumed valid and will be effective 14 days from filing unless PUC disapproves, modifies, or otherwise suspends tariff (not to exceed 45 days). A tariff to restructure rate can be suspended an additional 30 days. Commission may investigate whether price increases are consistent with Plan and whether terms and conditions and restructures are consistent with public interest. Tariffs reducing rates are effective and presumed valid 7 days from filing, unless PUC suspends tariff (not to exceed 45 days).
<b>Customer Notification</b>	Company to provide notice by bill insert or direct mail to affected customers of any price increase at least 14 days before rates increase.
<b>Price Changes Due to Governmental Action</b>	With Commission approval, the Company may adjust the prices of any service(s) due to the financial impacts of governmental actions that have a specific impact on the telephone industry. Commission will approve if: <ul style="list-style-type: none"> <li>• gov't action has been correctly identified;</li> <li>• financial impact has been accurately quantified;</li> <li>• proposed rates cover only financial impact of action;</li> <li>• rates are applied to appropriate class or classes of customer;</li> <li>• adjusted rates in public interest.</li> </ul>
<b>Financial Reporting</b>	File the financial surveillance reports currently filed with the Commission.
<b>Depreciation</b>	Company shall determine and set its depreciation rates.

<b>Service Quality Requirements</b>	Retain existing Service Quality Requirements.
<b>Infrastructure Requirements</b>	Not addressed.
<b>Commission Authority</b>	The Commission retains oversight of service quality, complaint resolution and compliance by the Company with all elements of the price regulation plan.
<b>Competitive Safeguards</b>  Examples:  Cost Allocation Cross Subsidy Imputation Price Floors	The price for any individual rate element offered shall equal or exceed its LRIC unless: 1) exempted by commission based on public interest, or 2) BST in good faith prices the service to meet the equally low price of a competitor.  Imputation Standard: Bundled Local exchange service and competitive service rates must include tariffed rate of unbundled function.

	<b>SOUTH CAROLINA</b>
<b>Proceeding/Status</b>	Consumer Price Protection Plan filed on 3/28/95. Hearings held 9/95. Decision approving plan with modification was issued 12/29/95.  Plan became effective 1/30/96.  On April 19, 1999, the South Carolina Supreme Court reversed the Circuit Courts Decision that approved BellSouth's Consumer Price Protection Plan. On May 4, 1999 BellSouth filed a Petition for Rehearing with the Court on the grounds that the Court overlooked or misapprehended certain matters of fact and law. The Petition is pending before the Court.  The description below outlines the plan as approved by the Commission on 3/28/95.
<b>Initial Term/Renewal/Review</b>	No term limit.
<b>Inflation Index</b>	GDP-PI.

<b>Inflation Formula Including Any Productivity Offsets/Inflation Thresholds</b>	GDP-PI - 2.1%.  To be applied to Basic services after cap expires and applied to Interconnection Services.
<b>Rate Caps</b>	5-year cap on Basic Category.  3-year cap on switched access.
<b>Rate Case</b>	Earnings investigation was conducted 1994; a \$42.2 million prospective rate reduction was ordered based on 12.75% ROE.
<b>Rate Reductions</b>	BST proposed \$16.9M reduction in earnings investigation; \$42.2 million ordered as follows:  \$12M - Switched Access \$5M - IntraLATA Toll \$7.3M - Hunting Charges \$5.1M - Hunting Application Changes \$1.3M - DID \$3.4M - PBX Trunks \$8.1M - Local Rates
<b>Service Categories Descriptions</b>	Basic: Residence and business flat rate service, PTAS, PBX Trunks.  Interconnection: Access to local and toll network.  Non-basic: All services other than Basic and Interconnection.
<b>Basic Service Category Pricing Rules</b>	5-year cap on all Basic. Thereafter, adjust by GDP-PI minus 2.1%. Increases to an individual service limited to GDP-PI plus 5% annually.
<b>Interconnection Category Pricing Rules</b>	3-year cap on switched access. Other Interconnection services, and switched access after cap expires, may be adjusted based on GDP-PI minus 2.1%.
<b>Non-Basic Category Pricing Rules</b>	Company sets prices. Increase to individual service is limited to 20% in a 12-month period.
<b>Service Reclassification Requirements</b>	Not addressed.

<b>New Service Definition and Rules</b>	New service is function, feature or capability not currently offered. Tariff shall become effective at end of notice period, but no sooner than 14 days.
<b>Tariff Requirements</b>	Company will file tariffs for all services. Tariff filings will include information to show compliance with pricing rules. Changes to terms and conditions to be effective upon 14 days notice; increases to be effective upon date specified in tariff, but in no event earlier than 14 days notice; decreases to be effective upon 7 days notice.
<b>Customer Notification</b>	Company to provide notice of any proposed price increase through newspapers and through bill inserts.
<b>Price Changes Due to Governmental Action</b>	Not addressed.
<b>Financial Reporting</b>	Company shall file a quarterly combined income statement for South Carolina.
<b>Depreciation</b>	Company shall not be required to seek regulatory approval of its depreciation rates.
<b>Service Quality Requirements</b>	Company to file service results in compliance with Commission rules.
<b>Infrastructure Requirements</b>	Not addressed.
<b>Commission Authority</b>	Commission retains authority with regard to Company's price for services, service quality, complaint resolution and compliance with plan.
<b>Competitive Safeguards</b>  <b>Examples:</b>  <b>Cost Allocation</b> <b>Cross Subsidy</b> <b>Imputation</b> <b>Price Floors</b>	Prices for all services shall equal or exceed LRIC unless a service is priced below its cost to meet public interest goals. Any other service priced below LRIC will be considered by the Commission on a case by case basis.  Imputation Standard: Requires imputation of originating and terminating switched access on a conversation minute of use basis for MTS, WATS and 800 Service. The average revenue per minute of use must exceed average switched access revenue per conversation minute of use. For high volume toll users there is a crossover formula that allows the imputation of one end of switched access plus one end of special access.

	<b>TENNESSEE</b>
<b>Proceeding/Status</b>	<p>HB 695/SB891 enacted and effective 6/6/95. Statute opens local franchise and establishes price regulation framework. BST filed application for price regulation 6/20/95.</p> <p>Commission conducted rate investigation and issued order on 1/23/96 for BST to reduce rates by \$56.3M effective 3/1/96. Order appealed; rate reductions and effective date of price regulation stayed by Court. On 10/1/97, the Court vacated the Commission's 1/23/96 Order finding that the Commission should have approved the price regulation plan based on 6/6/95 rates. The Court remanded the case to the TRA with directions to approve price regulation. On 6/15/98 TN Supreme Court denied TRA and CAD application for review.</p> <p>On 10/27/98, TRA approved BST's Price Regulation Plan, effective October, 1995.</p>
<b>Initial Term/Renewal/Review</b>	No term limit.
<b>Inflation Index</b>	GDP-PI.
<b>Inflation Formula Including Any Productivity Offsets/Inflation Thresholds</b>	Annual adjustments for each category capped in the aggregate at the lesser of GDP-PI - 2% or 1/2 GDP-PI.
<b>Rate Caps</b>	Basic Services and Call Waiting capped until 12/01/02.
<b>Rate Case</b>	PSC ordered rate reduction of \$56.3M based on their findings in earnings investigation. Court found earnings to be below the authorized ROR range and remanded to the TRA. No reduction required.
<b>Rate Reductions</b>	<p>Side agreement on intrastate switched access to reach parity with interstate switched access rates.</p> <p>PSC ordered \$56.3M reduction. Court vacated Order and remanded to TRA. TRA's 10/27/98 decision eliminated requirement to reduce rates.</p>

<b>Service Categories Descriptions</b>	<p>Basic: Residence and Business basic local services.</p> <p>Non-Basic: Services not defined as Basic.</p> <p>Interconnection: Provides interconnection with networks of other providers. Interconnection is subcategory of Non-basic.</p>
<b>Basic Service Category Pricing Rules</b>	Basic capped until 12/01/02. Thereafter, rates are to be adjusted according to the inflation formula. In no event shall basic residential service increase in any one year more than the % change in GDP-PI.
<b>Interconnection Category Pricing Rules</b>	<p>Inflation formula applies to rate increases for the subcategory as a whole.</p> <p>Side agreement to reach parity with interstate switched access rates.</p>
<b>Non-Basic Category Pricing Rules</b>	<p>BellSouth has the authority to adjust non-basic rates so long as rate changes are reductions or are revenue neutral within the category (12/1/98 - 12/1/99). As of 12/1/99, prices may be adjusted in the aggregate in accordance with the inflation formula.</p> <p>Call Waiting capped until 12/01/02.</p>
<b>Service Reclassification Requirements</b>	TRA can exempt a service or group of services from regulation.
<b>New Service Definition and Rules</b>	The maximum rate for any new Non-basic service first offered after the effective date of this act shall not exceed the stand-alone cost of the service.
<b>Tariff Requirements</b>	Company will file tariffs for all services unless exempted by the TRA.
<b>Customer Notification</b>	Not addressed.
<b>Price Changes Due to Governmental Action</b>	Not addressed.
<b>Financial Reporting</b>	Not addressed.
<b>Depreciation</b>	Company shall not be required to seek regulatory approval of its depreciation rates.

<b>Service Quality Requirements</b>	Not addressed.
<b>Infrastructure Requirements</b>	LECs required to complete funded FYI requirements.
<b>Commission Authority</b>	In addition to any other jurisdiction conferred, the TRA shall have the original jurisdiction to investigate, hear and enter appropriate orders to resolve all contested issues of fact or law arising as a result of the application of this Act.
<b>Competitive Safeguards</b>  <b>Examples:</b> Cost Allocation Cross Subsidy Imputation Price Floors	Imputation Standard: The price floor for competitive services shall equal tariffed rates for essential elements utilized by competing providers plus the total LRIC of the competitive elements of the services. When shown to be in the public interest, the PSC shall exempt a service or group of services provided by the incumbent LEC from the requirements of the price floor.

### C. SUMMARY OF PRP IN NON-BELLSOUTH STATES

The following, *Exhibit II-3*, provides a brief summary of the elements of regulations in a number of other non-BellSouth states.

#### Focused Review of the Price Regulation Plan BellSouth Telecommunications, Inc. - Kentucky

#### Exhibit II-3 Non-BellSouth States PRP Summary

State	Company	Type Regulation	Term	Major Plan Characteristics
Alaska (Large Telcos)		ROR	Open	Streamlined intervals for increases up to 6%. Flexibility to cut rates and introduce promotions to meet competition.
Arizona	USW	ROR	Open	Some services flexibly priced to meet competition.
Arkansas	SBC	Price Regulation	Open	SBC elected price regulation contained in 1997 law. Basic rates and switched access are capped at $\frac{3}{4}$ GDP-PI, however,

State	Company	Type Regulation	Term	Major Plan Characteristics
				<p>basic rates deregulated in any competitive local exchange. Non-basic service rates deregulated. 1997 law under court challenge. Law allows that if at any time following three-year anniversary of price regulation election another provider offers basic local exchange or switched access service within the electing company's local exchange area, the electing company may set its own rates in the same manner as competitive services are set.</p>
California	SBC	Price Regulation		<p>Price cap index suspended in 1995. PUC continued suspension in 1998 Order as of 1/1/99, but did not eliminate it. PUC indicated it expects permanent elimination at next review. Prior to suspension, productivity offset was 4.5%. In addition, Commission suspended but did not eliminate sharing of earnings effective 1/1/99. Rate cap on basic residence continued until 2001. Exogenous (Z Factor adjustments) recovery eliminated. SBC must continue to file annual earnings for review in April of each year. Commission eliminated depreciation reviews and approvals effective 1/1/99.</p>
Colorado	USW	Price Regulation	5 Years from effective date.	<p>Stipulation verbally adopted 2/2/99. Plan includes the ability to price retail services flexibly between price floors and price ceilings. USW may make filing to change price ceilings on any service except</p>

State	Company	Type Regulation	Term	Major Plan Characteristics
				residential and business local exchange service which is capped for the duration of the plan. Customer specific contracting authority granted. USW may bundle services into a new service with initial tariff establishing the price ceiling, after which price changes are accomplished through a revised price list on 14 days notice. Service quality measures established with penalties in the form of bill credits when measurements not met. USW agrees to a series of revenue reductions, foregone rate increases, and required investment as part of stipulation.
Connecticut	SNET	Price Regulation	Open	Noncompetitive services indexed to GDP-PI, however, levels don't increase unless inflation is 5% or more, at which time, levels can rise at about 1/2 rate of inflation. Competitive services not capped.
Delaware	BA	Price Regulation	3/01.	Basic services subject to GDP-PI minus 3%. Competitive services flexibly priced. March 1998 plan extended to March 2001 with same parameters.
D.C.	BA	Price Regulation	Open	Basic exchange services and access frozen until 2000. Other basic services indexed to GDP-PI minus 3%. Discretionary services limited to 15% increase per year. Competitive services not regulated.
Hawaii	GTE	ROR	Open	Traditional rate of return regulation

State	Company	Type Regulation	Term	Major Plan Characteristics
Idaho	USW	ROR/ Deregulation	Open	Basic local exchange services and five or less business lines are still under ROR. All other services are deregulated.
Illinois	Ameritech	Price Regulation	Until at least 10/01.	Residential rates capped for duration of plan. Other non-competitive services indexed to GDP-PI minus 4.3% minus service quality penalties and exogenous changes. Plan has four baskets: 1) residential; 2) business; 3) wholesale (carrier); and 4) Other (private lines, operator services, etc.). Upward pricing flexibility limited to 2% above the price cap index. Access is capped at interstate. Intrastate toll excluded from plan. Competitive services flexibly priced. Can declare services competitive and have removed from price cap. Service quality goals contained in plan.
Indiana	Ameritech	Price Regulation	Interim	Interim plan replaces price cap plan that expired in 1997. Interim plan uses 1.9% inflation with 6.5% productivity factor (FCC's factor) to effectively reduce basic local business and residence rates by 4.6%. Permanent plan not yet established.
Iowa	USW		6 Years.	Plan adopted 9/98. Initial basic service prices reduced on average by 3% on effective date of plan. Average intrastate switched access prices reduced to 12/31/97 average interstate level. Other than switched access, basic prices can increase on annual basis through 2000 based on GDP-PI minus a 2.6% productivity factor. Inflation

State	Company	Type Regulation	Term	Major Plan Characteristics
				rate and productivity factor may be modified after 2000. Price increases can be accumulated but not for more than 3 years. Accumulated price increases limited to 6%. Non-basic services include those not in basic and not regulated. Prices are those in effect on effective date of plan and new services will be classified as non-basic. Plan also includes an infrastructure and modernization commitment.
Kansas	SBC	Price Regulation	Open	Plan approved September 1998 setting up three categories of services: 1) residence and single line business and Touch-Tone, (excludes USF assessments) where prices are capped until 1/2000 except for increases allowed as part of rate rebalancing. Afterward cap prices can be adjusted based on GDP-PI minus 2.3% +/- exogenous factors; 2) Switched access, which is capped based on 1997 levels and subject to revenue neutral rebalancing; 3) Miscellaneous services, where prices can change up or down based on formula GDP-PI minus 2.3% +/- exogenous factors. Kansas law allows Commission to deregulate price of any service if an alternative provider is offering comparable service. Toll prices will be deregulated when 1+ intraLATA is available throughout USW's service territory in Kansas.
Maine	BA	Price Regulation	1999	All services are under GDP-PI minus 4%. Penalties are

State	Company	Type Regulation	Term	Major Plan Characteristics
				applied for poor service. In March 1998, Commission approved a rate rebalancing settlement that will cut access charges by 75% and raise local rates by \$3.50 per line per month by June 1999. This will result in an overall revenue reduction of \$50M.
Maryland	BA	Price Regulation	Open	Plan contains six categories of services: 1) Basic Residence; 2) Basic Business; 3) Access; 4) Discretionary; 5) Competitive; and 6) Miscellaneous services and elements. Categories 1, 2 and 3 are capped until 12/99. Category 4 and categories 1, 2 and 3 after cap expiration are subject to GDP-PI minus rolling 3-year average change in CPI +/- an adjustment for exogenous factors. No service can increase more than 10% per year.
Massachusetts	BA	Price Regulation	2001	Basic residence service frozen until 2001. All other services are subject to GDP-PI minus 4%.
Michigan	Ameritech	Price Regulation	12/00	Noncompetitive services (residence and business access lines, local usage) are subject to the Detroit area CPI minus 1%. Competitive services are not rate regulated. All Telcos are under legislative mandate to bring rates to cost by 2000.
Minnesota	Ameritech	Price Regulation	2003	Basic local service and access charges are capped for the five-year term of the plan. No rate increases allowed on price capped services except to cover exogenous cost changes occurring after 2000 because of federal or state government

State	Company	Type Regulation	Term	Major Plan Characteristics
				actions. Local rates will be reduced by \$120M over five years and access charges will be cut \$180M in escalating steps through 2003. Long distance companies will have to pass on all access savings. Toll and most vertical services can be changed on 20 days notice. Rates for fully competitive services, including most digital data services, are deregulated. New service quality standards for installation and repair of specialty business and high speed data services are added to existing standards.
Missouri	SBC	Price Regulation	Open	Basic service rates are frozen until 12/99 after which they are subject to a formula to be determined during 1999. Formula will be based on changes in CPI minus TS (change in telephone service) or GDP-PI minus a productivity factor established by FCC. A company can seek PSC authority to use GDP-PI and apply a factor different from FCC. Access is capped at 150% of interstate rates. Non-basic services rates can be raised by up to 8% per year. Beginning in 2001, SBC can petition to deregulate any service facing effective competition.
Montana	USW	ROR/ Deregulated Services	Open	Noncompetitive services are under ROR, however, company can match competitors where local competition is emerging. Flat rate residence to increase \$1.35 on 10/98 and \$1.60 on 7/99. Low income support customers are not increased. Business rates were combined

State	Company	Type Regulation	Term	Major Plan Characteristics
				into a single rate group effective 10/98 which resulted in a decrease of approx. \$2.88 for most business customers. Access charges to be reduced by \$1M on 7/99. All other services are under a rate freeze until Jan. 2000. Allowed to rebalance long distance by increasing short haul and decreasing long haul rates. Company to allow customers to have both flat and measured service in the same household.
Nebraska	USW	Deregulation	Open	Retail rates are deregulated, however, PSC can roll back excessive increases. Any size increase is okay if it is revenue neutral. Local rate regulation is eliminated in areas where competitors operate. Commission approved rate rebalancing, however, need PSC approval for increase in 1FR. On 1/20/99 the Commission approved tariff filing to raise residential first line rates by \$1.80 and decrease prices of intrastate long distance, switched access and Custom Choice. USW to step up promotion of Lifeline, Link-Up and measured service options.
Nevada	SBC	Price Regulation	1999	Basic services are capped through life of the plan. Non-basic service rates can increase 5% per year up to a cumulative of 20%. Competitive services have full pricing flexibility.
New Hampshire	BA	ROR	Open	
New Jersey	BA	Price Regulation	1999	Residence rates are frozen through 1999. Other services

State	Company	Type Regulation	Term	Major Plan Characteristics
		w/Sharing		are subject to GNP-PI minus 2%. Some competitive services are not regulated. Earnings over 13.7% are shared 50/50 with ratepayers.
New Mexico	SBC	ROR	Open	All services are subject to ROR, however, toll prices subject to competition can move according to a banded rate schedule.
New York	BA	Price Regulation	2000	Basic services are frozen through the life of the plan. Non-basic services are subject to GDP-PI minus 4%. Competitive services are market priced.
North Dakota	USW	Price Regulation	Open	Basic services and access services are subject to changes in GDP-PI with no offset. Non-basic services are deregulated.
Ohio	Ameritech	Price Regulation	1/9/01.	Basic service rates are frozen until 2000. All other services are subject to GDP-PI minus 3%. Virtually no upward pricing flexibility available. Ameritech agreed to up front rate cuts of \$34M in basic services and \$2M in access by 2000.
Oklahoma	SBC	ROR	Open	All services subject to ROR, however, company can file to de-tariff services facing competition.
Oregon	USW	ROR	Open	USW returned to ROR from price regulation in 1996 due to poor service quality. Currently working on legislation to get relief. Most recent rate case results are under appeal.
Pennsylvania	BA	Price Regulation	1999	Basic service rates are frozen through 1999, however, decreases are required if GDP-PI falls below 2.9%. Other services are subject to GDP-PI

State	Company	Type Regulation	Term	Major Plan Characteristics
				minus 2.93%. Competitive services are flexibly priced.
Rhode Island	BA	Price Regulation	2001	Noncompetitive services rates are subject to lesser of CPI or 6%. Other noncompetitive services are subject to lesser of 5% or twice CPI. Competitive services are not rate regulated.
South Dakota	USW	Price Regulation	Open	Basic rates are capped at current levels. Access charges are frozen unless a change is cost justified. Rates for all other services are deregulated. A rebalancing program is tied to service quality such that USW may raise local service rates to cost-based cap levels by year end 1999 if quality levels are maintained. This program was suspended by a 1998 law that prohibits raising local rates above January 1998 levels except by act of the legislature.
Texas	SBC	Price Regulation	Open	Basic rates are frozen until 1999 after which they are subject to CPI minus a PUC established productivity factor. Discretionary services can increase up to 10% per year and competitive services can be market priced anywhere above cost. Plan could be reviewed by legislature in 1999 session. Buy-ins include installing digital upgrades by 2000 and offering discounted broadband services to schools, libraries and hospitals.
Utah	USW	Price Regulation	Open	All services are capped until EOY 2000 after which all services are subject to a price cap indexed to inflation by a method to be determined by the Commission. Although



State	Company	Type Regulation	Term	Major Plan Characteristics
				service rates are capped, some increases associated with 1/98 ordered rate rebalancing which shifts about \$22M from business, toll and access to residential local service.
Vermont	BA	ROR	Open	BA filed a "price point" plan on 2/12/99.
Virginia	BA	Price Regulation	Open	Basic service rates are frozen until 2001. Other noncompetitive services (and basic rates after 2001) are subject to ½ GDP-PI. Competitive services are flexibly priced.
Washington	USW	ROR	Open	USW came under ROR in 1994 when incentive regulation plan expired. USW can petition to de-tariff competitive services. In January 1998, Commission approved \$58.8M increase raising residential service by \$2.00 per month (to \$12.50) and business by \$1.60 to (\$26.60). In addition, Commission instituted a \$50 cash payment to customers for missed appointments (customer service guarantee). USW working on legislation to provide relief from rate of return regulation.
West Virginia	BA	Capped Services	2001	Basic service rates are frozen, access charges are capped and competitive service rates are deregulated (no service yet classified in this category). Plan extended to 2001 with network investment commitment, school technology grant program and \$6M reduction in business rates. No earnings restrictions.
Wisconsin	Ameritech	Price Regulation	6/30/99	Noncompetitive services (residence primary lines, 1-3

State	Company	Type Regulation	Term	Major Plan Characteristics
				business lines and local usage) are subject to GDP-PI minus 3%. Virtually no upward pricing flexibility available. Competitive services flexibly priced. Review scheduled for mid-1999. Recently, consumer group has asked PSC to cut rates by \$45M and regulate more optional services, such as Call Waiting and Directory Assistance.
Wyoming	USW	Price Regulation	Open	Residential basic exchange rates are capped except for increases needed under rate rebalancing program intended to bring local rates to cost by year end 1998. Non-basic and competitive services can be market priced as long as they remain above cost.

#### D. FINDINGS AND CONCLUSIONS

While this chapter is primarily intended to provide backgrounds on the evolution of PRP within the industry, there are some comparisons that can be made between the BellSouth programs.

*II-F1*     The PRP plan in Kentucky was the first to be placed in service among the nine BellSouth States.

The implementation of PRP was undertaken simultaneously in almost all nine states. However, the plan was first approved in Kentucky on July 20, 1995. This is somewhat important because the results of the Kentucky decision influenced BellSouth in the other jurisdictions.

We did not review the actual records in the other jurisdictions regarding how the Efficiency Factors were set. However, a review of the table below, *Exhibit II-4*, shows that Kentucky was higher than any other state.

**Focused Review of the Price Regulation Plan  
BellSouth Telecommunications, Inc. - Kentucky**

**Exhibit II-4  
Summary of BellSouth PRP Elements**

State	Effective Date	Inflation Index	Efficiency Factor	Rate Cap Years
Kentucky	7/20/95	GDP-PI	4.00%	3 yrs.
Georgia	8/5/95	GDP-PI	2.00%	5 yrs.
Alabama	9/20/95	GDP-PI	3.00%	5 yrs.
Tennessee	Oct-95	GDP-PI	2.00%	7 yrs.
Florida	1/1/96	GDP-PI	1.00%	5 yrs.
Mississippi	1/1/96	N/A	N/A	3 yrs.
South Carolina	1/30/96	GDP-PI	2.10%	5 yrs.
Louisiana	4/1/96	GDP-PI	2.50%	5 yrs.
North Carolina	6/24/96	GDP-PI	2.00%	3 yrs.

**II-F2** In addition to the nine programs in place within the BellSouth States, there are 28 other Price Regulation Plans identified in other jurisdictions within the United States.

A review of *Section C* of this chapter identifies the types of regulation in place in the non-BellSouth states. While this list is not necessarily comprehensive, it does show how PRP has become the predominant regulatory mechanism for telephone utilities.

A review of how residential or non-competitive services are addressed relative to efficiency factors shows:

- Twenty-one programs have rates that are frozen or capped during the current period.
- Maine has an efficiency factor of GDP-PI minus 4%, the same as Kentucky.
- In Indiana, an interim plan uses 1.9% inflation with 6.5% productivity factor (FCC's factor) to effectively reduce basic local business and residence rates by 4.6%. Permanent plan not yet established.
- Eight states have efficiency factors that are below that of Kentucky or are a percentage of the GDP-PI.



### III. SIGNIFICANT REGULATORY, STRUCTURAL AND TECHNICAL CHANGES

#### A. REGULATORY AND LEGISLATIVE ACTIVITY

In this section, a brief description of regulatory and legislative activities which have occurred since the implementation of the PRP are described.

##### TELECOMMUNICATIONS ACT OF 1996

This sweeping Federal legislation was intended to provide the framework for opening local competition. It describes the obligations which local exchange carriers have with respect to resale, number portability, dialing parity, access to rights-of-way, the obligations of a local exchange carrier for Section 252, Procedures for Negotiations, Arbitration and Approval Agreements associated with requests for interconnection, unbundled access, resale and collocation. The provisions for an arbitrated agreement between an incumbent local exchange carrier and another carrier were detailed, including the associated responsibilities of the State Commission.

A broad requirement detailing the pricing standards for interconnection and network element charges was provided. It stated that the charges should be based on cost, without reference to a rate-of-return or other rate-based proceedings, be nondiscriminatory, and include a reasonable profit.

The procedures to review Universal Service requirements are also detailed. The FCC was directed to refer to a Federal-State Joint Board a proceeding to recommend changes required to implement Universal Service. Universal Service principles were established as well as individual state authority regarding their universal service funding requirements.

Another major piece of the legislation spoke to the requirements for Bell Operating Company entry into InterLATA services (Section 271). In particular, two tracks for the RBOC to petition were defined: presence of a facility-based competitor and no interconnection requests. Additionally, a competitive checklist set of requirements for the RBOC to satisfy was established.

Other issues related to affiliate relations, joint marketing, and manufacturing were discussed. Another section of the legislation (Section 301) dealt with cable reform.

##### FCC INTERCONNECTION ORDER

This Order was the FCC's effort at establishing the operational rules to effect the implementation of the Telecommunications Act of 1996. It defined the specific interconnection rules and addressed the concept of "technically feasible."

The requirements for UNEs were detailed and the specific unbundling requirements were defined. Collocation issues and standards were established. Finally, the pricing of

interconnection and UNEs was defined. The FCC defined the appropriate pricing standard to be based upon Total Element Long Run Incremental Cost (TELRIC) including a component of common cost. De-averaging of UNE costs was also discussed. The second pricing issue resolved was resale pricing. A detailed account-by-account methodology was described for computing the wholesale discount value. Other issues associated with wholesale service, such as promotions, discounts, cross-selling, below-cost pricing and provisioning were discussed.

## UNIVERSAL SERVICE

At the Federal level, the issue of the High Cost Fund continues to be unresolved. Significant differences exist between members of the Federal-State Joint Board. In its May 7<sup>th</sup>, 1997 Order, the FCC defined supported services, defined criteria for designating eligible carriers, and determined the allocation between state and federal funding. The formula for determining support amounts was based upon a revenue benchmark approach. The revenue benchmark, which included local service, vertical service and Inter/Intra state access revenues, was subtracted from the forward looking cost. However, the appropriate model definition was not provided, as the model to be used was still being debated along with the definition of critical model input parameters. Finally, the FCC determined the funding split as federal 25% and state support at 75%. These proposals were met with much criticism. As such, the FCC (based upon input from the state members of the Joint Board) referred back to the Joint Board for additional discussion issues related to the determination of the support level and the federal/state contribution levels.

The Joint Board's Second Recommended Decision significantly modified earlier FCC actions. Essentially, the support level was now being set upon a national average cost benchmark, which would be between 115 and 150% of the national weighted average cost per line. The contribution levels also were significantly modified. Federal support would only be provided to the extent that a state was unable to support high cost areas through its own efforts.

No final decisions related to cost model selection, model input parameters, and structure of the Federal High Cost Fund have yet been made.

The Commission issued on May 22, 1998, an Order stating that the Kentucky Universal Service Fund (KUSF) would begin January 1, 1999. This Order was predicated upon a revenue benchmark approach using the HAI model, with specified input variable values, as the determinant of the forward-looking cost. Based upon the indecision at the Federal level, the Commission, in an Order dated August 7, 1998, delayed implementation of the high-cost support until July 1, 1999. However, it did retain the earlier date for implementation of the low-income support of the KUSF. Then, in an Order issued November 16, 1998, the Commission defined the surcharge amount \$.05 that each ILEC, CLEC and wireless carrier could bill monthly per access line to fund the estimated low income fund size of \$1 million. The fund is known as the Kentucky Lifeline Support.

A credit of up to \$10.50 for eligible customers is available in which \$3.50 is funded by the Kentucky Lifeline Support and \$7.00 is supported by the federal USF.

As of this report, the Commission has not yet established a high-cost fund mechanism. Until the FCC resolves the federal issues, states will not have clear policy paths to follow.

## B. INDUSTRY STRUCTURAL CHANGES

This task assessed the changing competitive markets in Kentucky in light of rapid technological innovation and deployment and regulatory changes, and evaluated BST's response in terms of its strategic, network, marketing, and operational plans and decisions. Of particular interest, is the impact of Kentucky regulation and the Telecommunications Act on planning and decision making.

This task presented the greatest challenge of the *Tier 2* review in that it required a determination of the very meaning of competition as a baseline. This was no menial task nor is it academic. There are numerous factors at work in the telecommunications environment at the present time that challenge the traditional view of competition in the local exchange market. Some of the very real questions that Vantage grappled with throughout the review included:

- Does competition mean that the market is open to competition or that competitors have actually entered the market?
- What defines "market" for purposes of competition?
  - Does facility based competition to any one area of customers served by an ILEC mean that competition exists in that market segment?
  - Does competition in the Louisville business market mean that all business markets in the BST-KY service territory have competition?
- Does the opportunity for competition that has not been acted upon by CLECs mean that there is no competition?
- Do alternative technologies, most notably wireless at this point in time, qualify as competition?

## CONVERGENCE

Convergence refers to the coming together of technologies necessary for provision of telecommunications services. Video over copper, voice over IP, Internet over cable and satellite, the distinctions are becoming very blurred. Increasingly, convergence also means the mergers and combinations of companies providing the various services. Market participants can no longer be labeled as wireless, cable, ISP, local exchange or inter-exchange. The speed of this convergence is nothing short of phenomenal.

The following changes have taken place in the industry structure just during the course of this review:

- AT&T acquired TCI and MediaOne giving AT&T access to 26 million homes via cable lines.



- BellSouth acquired an interest in Qwest. Less than two weeks later, Qwest announced a planned acquisition of US West (which was being sought by Global Crossings and who was also pursuing Frontier). Qwest ultimately merged with US West, while Global Crossings merged with Frontier.
- AOL formed a strategic alliance with DIRECTV®, which among other things, provides AOL a high-speed delivery mechanism for broadband Internet services.
- Bell Atlantic has announced a planned acquisition of GTE, which has direct implications for Kentucky.
- SBC appears to have cleared regulatory hurdles in Illinois, which will allow it to acquire Ameritech. (SBC had previously acquired PacTel.)

The AOL alliance provides a good example of not only industry convergence, but also technology and service convergence. Only a few years ago, AOL was a value-added ISP providing services to primarily the home market through the Public Switched Telephone Network (PSTN). Now AOL is offering numerous services through various alliances and with multiple delivery mechanisms.

The alliance with DIRECTV® provides AOL a mechanism of providing interactive AOL TV and high-speed Internet access. AOL also has partnerships with Bell Atlantic and SBC to deliver DSL broadband connectivity to its members. According to Bob Pittman, President and CEO of AOL:

*"Through this alliance [with DIRECTV®], along with the partnerships we've forged with telecommunications companies, we now have the ability to offer best-of-breed services ranging from long distance telephone and broadband access to interactive TV and dial-up connectivity at attractive package prices to our members--making AOL even more central to their daily lives."*

This example was chosen because it highlights several important themes of the modern telecommunications environment.

- Partnerships and alliances may include companies that continue to compete in certain areas even while partnering on particular service offerings or facility sharing. This is not new (witness the IXC and ILECs), but it is becoming visible.
- Focus is shifting to the service being provided, not the facilities that are used to deliver the service.
- The future of telecommunications lies in packaged offerings or "one stop shopping". These bundled packages will be assembled in all manner of ways using different technologies and often combining offerings from various companies seamlessly bundled under one umbrella.
- Companies are willing to cannibalize their own service offerings allowing the market and the customer to decide what technology will "win".

The telecommunications industry of tomorrow will see relatively fewer providers who are capable of offering a total package of telecommunications services (long distance, local, vertical services, cellular or PCS, paging, video) all bundled under one bill. Indeed this is

happening today as Sprint offers reduced rates on Earthlink, AT&T can bundle long distance landline, wireless (analog, digital cellular or PCS) and other services on one bill.

## COMPETITORS

During the original consideration of the PRP, there was considerable testimony concerned with the issue of whether BellSouth was experiencing competitive pressure or even whether such pressure would ever really exist. Vantage did not concern itself with the state of competition at that time, other than for trending. However, that competition has now arrived in Kentucky is a certainty. The Vantage tasks were to attempt and determine the impact that the price regulation plan has had on competition, and determine what, if any, changes to the plan would forward the Commission's goal of competition.

In order to determine these factors, the state of competition must be determined as well as trends. Even this task has become increasingly complex and difficult. The fact that competition has arrived means that all inclusive data is no longer available. This is for several reasons:

- CLECS and CAPS are not required to provide the information that is available from BellSouth.
- Companies are increasingly wary of divulging any information which may make its way to a competitor. This makes benchmarking and other comparisons almost impossible.
- The definition of competition itself is changing to include a multitude of new products, services and delivery mechanisms.
- Much of the competition is coming in the form of new products and services (primarily data). This means that market losses by BellSouth are often invisible and take the form of lost opportunities rather than stolen customers.

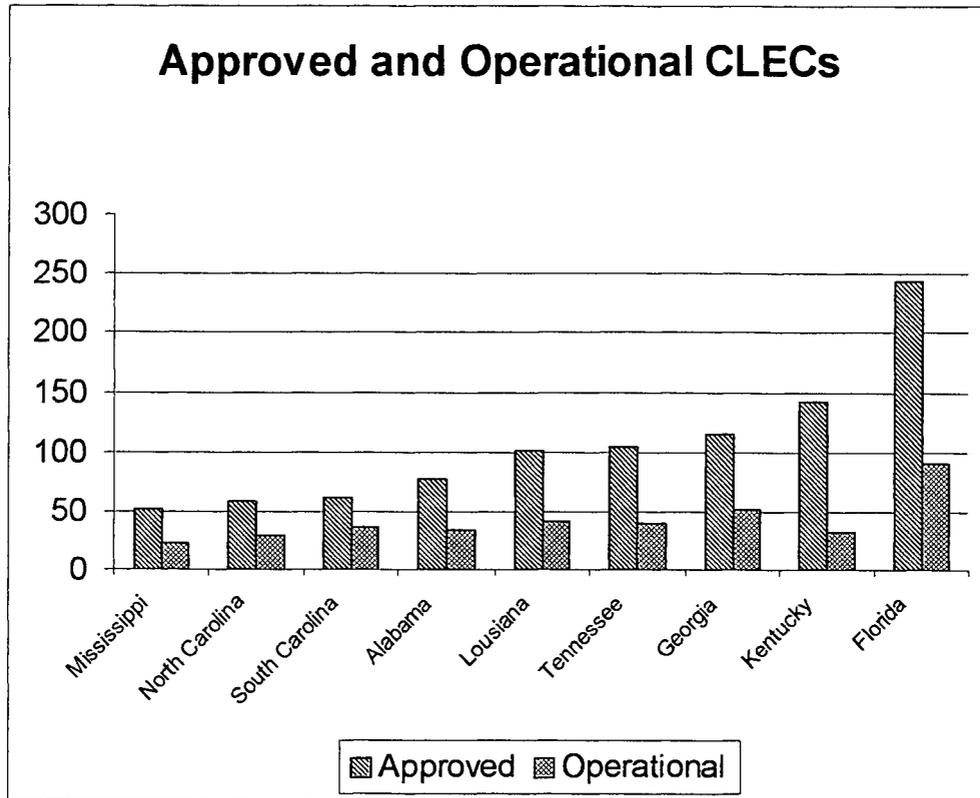
Even with these limitations, Vantage felt it critical to make some determination on the state of competition in Kentucky and to compare that to other states.

## APPROVED AND OPERATIONAL CLECS

As of January 1999, nearly 1,000 CLEC approvals had been granted for Wireline Service in the nine BellSouth states.<sup>1</sup> Kentucky had approved 143 CLECs and another 14 applications were pending. As shown in the following exhibit, the number of approved CLECs does not necessarily correspond to operational CLECs. Kentucky has the second highest number of approved CLECs in the nine-state territory at 143, but the lowest number of operational CLECs at only 22. *Exhibit III-1*, below, shows approved and operational CLECs in the BellSouth states.<sup>2</sup>

**Focused Review of the Price Regulation Plan  
BellSouth Telecommunications, Inc. - Kentucky**

**Exhibit III-1<sup>3</sup>  
Approved and Operational CLECs**



Even the number of operational CLECs can be misleading in terms of the extent of competition in a state since many target only high revenue customers or special applications (ISPs, campus facilities etc). For example, Florida has nearly three times the number of operational CLECs as Kentucky. However, this can not be interpreted to mean that Florida has more widespread competition.

### **FACILITIES**

Kentucky has the lowest number of resold lines in the nine-state region. As of April 1999, Kentucky had 35,928 resold lines. The distribution of these lines is shown in *Exhibit III-2*, below:

**Focused Review of the Price Regulation Plan  
BellSouth Telecommunications, Inc. - Kentucky**

**Exhibit III-2<sup>4</sup>  
Kentucky Resold Lines**

	Number	Percent of Total
Business Lines	17,244	48.0
Residential Lines	17,132	47.7
ISDN	176	.5
PBX (trunks)	1,193	3.3
Multiservice Lines	127	.4
Private Lines/Data Circuits	56	.2

The mix of resold lines in Kentucky shows slightly fewer residential resold lines than the other eight BellSouth states, as shown below in *Exhibit III-3*.

**Focused Review of the Price Regulation Plan  
BellSouth Telecommunications, Inc. - Kentucky**

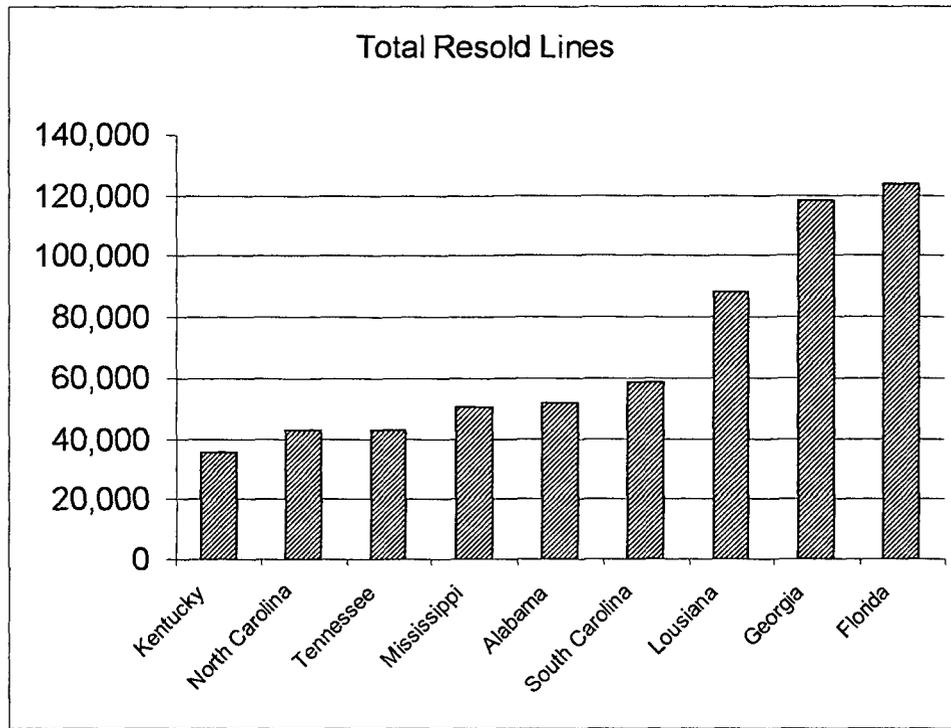
**Exhibit III-3<sup>5</sup>  
Percent of Resold Lines In BellSouth Region (Excluding Kentucky)**

Type of Resold Line	Percent of Total resold Lines
Business Lines	37.8
Residential Lines	58.5
ISDN	0.3
PBX(trunks)	2.3
Multi-service Lines	0.6
Private Lines/Data Circuits	0.5

As shown in *Exhibit III-4*, below, Kentucky has the fewest number of resold lines of any BellSouth state. The reasons for this are not entirely clear. There are other anomalies such as Alabama having more resold lines than Tennessee or North Carolina. It is our conclusion that the resale market is still so small that any analysis based on comparative state numbers is misleading.

**Focused Review of the Price Regulation Plan  
BellSouth Telecommunications, Inc. - Kentucky**

**Exhibit III-4<sup>6</sup>  
Total Resold Lines**



### CLEC GROWTH

Competition is evident from CLECs many of which are experiencing tremendous growth. The vast majority of this growth has been in the business markets. Despite the growth in CLECs, they still represent a small percentage of total access lines. This is because of the small base upon which their growth has been built. (basically starting from zero) The V.P. of Data and Internet Product Management at e.spire had this to say about CLEC growth:

*"The new competitive carriers, such as e.spire, are like the grains of rice; starting out very small, but then doubling, tripling, even quadrupling in size in a remarkably short period of time. In fact, CLEC industry revenue has doubled every year since the Telecom Act, and is expected to continue doubling for the next several years at least.*

*At my own company, our revenue grew by a factor of six last year alone, and as a result, we won the distinction of being named the "fastest growing network company in the industry" by Network World Magazine."*<sup>7</sup>

At the end of 1998, new phone entrants controlled 2.7 million access lines or 1.7% of the market. This is up from 1.7 million access lines or one percent of the market a year earlier. The FCC estimates that the number will exceed 4 million access lines by the end of 1999.<sup>8</sup> (To be consistent, Vantage has used the term "market" as used in the referenced document. However, as we will point out, "market", in fact, constitutes vastly different customers, technology and competitors.)

### **Hyperion (Adelphia)<sup>9</sup>**

Hyperion is a regional CLEC operating in the Eastern United States and Canada. Hyperion is a subsidiary of Adelphia Cable, one of the largest cable TV companies in the U.S. with more than 1.3 million subscribers in 13 eastern states. Hyperion provides phone service in 22 networks in 11 states, including Kentucky. In Kentucky, Hyperion operates in Louisville and is constructing network facilities in Lexington. Through agreements with fiber optic network providers, Hyperion interconnects much of its 22 markets with first- and second-tier cities in the eastern U.S.

In a press release announcing agreements with several fiber optic providers, Hyperion listed benefits and opportunities to local business communities served by its expanded network.

*"First, it allows Hyperion to efficiently and cost-effectively access under-served third tier markets and provide them with the latest on fiber optic communications. The network also provides Hyperion with the enabling architecture to extend service offerings to include data applications such as IP, ATM and Frame Relay. Additionally, it provides Hyperion with the foundation for an Internet backbone."*

In Kentucky, Hyperion is thought to serve the largest private sector employer in the state, Humana, located in downtown Louisville. BellSouth provides no telecommunications services to the Humana building.

### **ICG Telecom Group**

ICG Telecom is part of the ICG Communications family, which includes Canadian and U.S. Companies. ICG Telecom is headquartered in Denver, where the company first began offering competitive telecommunications to the business markets in 1991. ICG offers competitive local exchange telecommunications services via a fiber-optic network. ICG offers local, long distance, data services and enhanced telephony in Colorado, California, Texas, the Ohio Valley, and parts of the Southeastern U.S., including Kentucky. ICG Telecom has been primarily a CAP until recently.

In addition to ICG Telecom, ICG also has at least two other telephony related companies operating in the U.S. Fiber Optic Technologies provides network design, installation, maintenance and support of IT and communications systems for large businesses. ICG Satellite Services provides satellite based voice, data and video transmission services through teleports in Atlanta, Denver, Los Angeles, and New York. ICG Satellite Services also operates a maritime telecommunications network and VSAT (very small aperture terminal) private data networks.<sup>10</sup> The Satellite Services Division was sold during August 1999, but the sale was not expected to be finalized until after completion of this report. On

September 5, 1999, as this report was being prepared, ICG announced the sale of its fiber optic unit to ACG Communications.

ICG Telecom's stated mission is:

*"to become the leading, state-wide CLEC in markets served by bringing the benefits of advanced communications technology and world-class services to an audience once held captive by the incumbent local exchange carriers."<sup>11</sup>*

ICG would apparently leverage its relationship with long distance carriers. ICG Telecom has operated primarily as a "carriers carrier", providing services to resellers and IXCs. ICG Telecom currently has a network in Louisville. Within the BellSouth territory, it also operates in Atlanta, Birmingham, Charlotte, and Nashville. Networks are under development in Greensboro and Winston-Salem. As of August 1999, ICG had announced no plans to offer residential local exchange service.

### **e.spire**

e.spire, headquartered in Maryland, operates its network in 23 states offering fiber, switched services and or ATM. e.spire offers data availability in 47 of the 48 contiguous states.<sup>12</sup> As of the fourth quarter of 1998, e.spire was thought to have more than 70 miles of self-healing fiber SONET ring technology in Louisville. The SONET ring passed the hospital district, Federal reserve building and the East End, e.spire was expanding its network to the areas around the University of Louisville and the Louisville Airport.<sup>13</sup>

e.spire focuses on the business market with targeted services offered through a bundled package. A prominent service promoted by e.spire is the Platinum service, which is an integrated T-1. Platinum service includes local, long distance, 800 service (inbound), Internet and data services. The local service under this plan provides flat rate pricing and includes several custom calling features, including call hunting, call waiting, call forwarding, and three-way conferencing. Customers can also add voice and data circuits under this plan with no additional charge (up to the capacity of the T-1).<sup>14</sup>

### **Case Study – A Residential Facility Based CLEC**

While it sometimes seems that all of the competition in telecommunication to date has been focused on large businesses, there are some instances of small, facility-based CLECs pursuing the residential customer. During the course of this study, one of the Vantage consultants had the opportunity to sign up for residential service with a CLEC. Vantage took advantage of this fortuitous timing and arranged interviews with the CLEC. The company does not operate in the BellSouth service territory, which hopefully provided more open and revealing interviews than might have been the case with a direct competitor of BellSouth.

By no means do we suggest that the operation described in the following is representative of CLEC competition in the future or indicates competition. The purpose of the case study is to describe for the reader how a successful, if small, facility-based CLEC can operate in the post-TA96 environment.

King's Deer Telephone is a small CLEC which currently serves Monument, Colorado and portions of Colorado Springs. They are the exclusive provider of service to one subdivision (King's Deer) of 150 homes. Ultimately, the subdivision will have 530 homes and a golf course. The minimum lot size in King's Deer subdivision is 2.5 acres. With a golf course and certain natural terrain features that prevent development, the area is relatively low density. The home prices in King's Deer range from \$350,000-\$700,000. Despite the relative affluence of the market, US West was not willing to install upgraded facilities and had categorized the new development as rural.<sup>15</sup>

The CLEC also serves the immediate surrounding area of Monument, Co. Monument is a rapidly expanding area in northern El Paso county. The communities are being spurred by easy access to both Denver and Colorado Springs. Many of the newcomers to the area are two income families with one family member working in each of the cities. The CLEC had 10% penetration or 630 homes out of 6,300 in Monument and the surrounding area as of June of 1999. Their goal is 30 percent market penetration by EOY 1999.

The King's Deer subdivision is served exclusively with CLEC facilities. In this subdivision, the CLEC uses no UNEs and no resale. US West has no facilities in this subdivision. They operate in the subdivision with deep fiber.<sup>16</sup> They go within 2-3k feet of homes with fiber and then go copper the rest of the way. They carry the signal to electronics which are collocated in a US West MUX hut. They then carry via King's Deer fiber on to their 5ESS switch in Colorado Springs.

The CLEC just signed an agreement with a local neighborhood through a homeowners association to also provide facilities based phone service with a guarantee of 30 percent of the homes. This neighborhood is older and has US West facilities as well. Consumers in this neighborhood will have a choice. The CLEC is an affiliate of the local cable company (Tri-lakes cable) and lays in coax at the same time as the phone lines. This is interesting because they are coming in with fiber in the loop and then providing cable and phone via coax and twisted copper.

The surrounding area is served via resale exclusively at this point. The plan is to eventually take these lines at the US West switching office, transport them via their collocated electronics to their switch down in more urban Colorado Springs.

King's Deer Telephone also is running services in Colorado Springs to several apartment complexes. Again, it was unclear as to whether they would sell "wholesale" to the complex like some electric and gas utilities do or if they are going to try and pick up service one by one from the tenants.

### **IXCs as CLECs**

Following the Telecommunications Act of 1996 and the resulting arbitration, it appeared that competition for residential customers in the local phone network would come from the IXCs. Sprint, MCI (now MCI WorldCom) and AT&T all appeared to be the most likely early competitive entrants into the local phone market due to their experience, capital resources and prominence in arbitration proceedings.

It should come as no surprise to any student of the industry that local competition from the IXC's has not yet materialized. AT&T has seemingly chosen to enter the facilities based marketplace through cable rather than the PSTN. Sprint and MCI, in addition to merging, are focusing on the LD and wireless market as well as providing services to mid-market and large customers. It is only after the major IXC's have the opportunity to sell totally bundled services to residential customers and RBOC OSS Systems are fully open that residential customers will see competition. Also, IXC's are disencanted to enter local markets as their very entry creates RBOC competition in the long distance market.

### **Non-traditional Competition**

No discussion of competition would be complete without addressing competition coming from non-traditional sources. At the present time, these non-traditional competitors consist primarily of wireless service providers with cable appearing on the brink of becoming a very real alternative on a widespread basis.

### **Wireless**

While wireless service is not quite ubiquitous, it is approaching that level in many states. Wireless for purposes of this review consists of analog cellular, digital cellular, and digital PCS. Before discussing the competitive aspects of wireless service, the following is a brief description of the three primary wireless technologies.

*Analog cellular* has been in widespread use since the early 80's and service is now available in 90-95 percent of the United States. Analog cellular transmits voice over continuous radio waves at frequencies in the 800 MHz range. Analog cellular has few data applications and has the additional disadvantage that calls can be heard over scanners and service theft is possible.

*Digital cellular* uses the same approximate frequency range as analog cellular, but uses technologies called CDMA (Code Division Multiple Access) or TDMA (Time Division Multiple Access) to transmit the digital signal. Nextel uses a TDMA technology called iDEN that allows both digital and two-way radio service. Until recently, digital cellular was primarily found in the larger metropolitan areas. The Web sites of AT&T and Sprint would indicate that the service is being rapidly expanded. Digital cellular has the advantage that it can also operate as an analog phone if outside a digital cell. Other advantages over analog cellular are that digital cannot be heard over scanners, the service is very difficult to steal, service quality (clarity) is generally better, capacity is greater meaning fewer busy signals, and finally, messaging and paging is available usually as an option.

*Digital PCS (Personal Communications Service)* transmits at frequencies around 1900 MHz using CDMA, TDMA and GSM (Global System for Mobile Communications). Like some digital cellular phones, some PCS phones can also be used with analog cellular systems. These phones are referred to as dual-mode. PCS phones that can also operate over the digital cellular network are also available. These phones are referred to as dual-band. PCS is still primarily found in urban areas and the handsets are more expensive. Advantages beyond that of digital cellular include a larger system capacity and more options features including alphanumeric paging, e-mail, and Internet and Intranet access.

Wireless is a current viable alternative to landline voice service in those areas where it is available. As to whether a viable alternative constitutes competition is discussed elsewhere in our report. However, there is no question that wireless (both analog and digital cellular and PCS) can serve not only as adjuncts to landline telephony, but can function as a replacement. This is at least tacitly acknowledged by the FCC. In its Order on Universal Service, wireless carriers can be declared as eligible telecommunication carriers and receive Universal Service support. Also, they do not have to be the primary line into the house. According to an article in the *New York Times*, *Anderson Consulting* predicts that cellular phones will achieve "25 to 35 percent displacement" of wired telephones in five-to-seven years.<sup>17</sup> Competition has also driven down prices of both wireless service and hardware. According to *point.com*:

*"There's never been a better time to buy wireless service. With four-to-seven major wireless carriers in every major city competing for customers, competition has pushed airtime prices down by at least one-third and sometimes much more--during the last 18 months."*<sup>18</sup>

While cellular service has been competing with landline service for some time, PSC is becoming increasingly competitive for not only voice but data services. These services compete for the residential as well as the business customer. PSC competes not only on a standalone basis for voice, but offers the customer the opportunity to obtain bundled services as well. Not only is PCS becoming increasingly competitive as an alternative to landlines, but the competition among PCS providers is increasing. The following is a sampling of both cellular and PCS offerings available to residential customers. As with other sections of the report, we present these with the caveat that the costs and service plans are changing so rapidly that we fully expect changes between the report preparation and issuance dates.

Sprint offers PCS plans that start as low as \$29.99 per month with 120 minutes up to 1000 minutes for \$99.99 per month. These rates apply to all calls made on the Sprint network with roaming and long distance applying to calls made off network. These plans all include the following:

- Voice mail
- Numeric paging
- Caller ID
- Call Forwarding
- Call Waiting
- Three-way calling
- DA
- OS
- Basic 911

Text messaging is offered as an option as are numerous other features heretofore not considered part of telecommunications, such as roadside assistance.

AT&T also offers numerous wireless plans. One of the more interesting is Digital One Rate (DOR), which is offered in the following plans:

- 600-minutes \$89.99 a month
- 1000-minutes \$119.99 a month
- 1400- minutes \$149.99 a month

The DOR plan allows for the use of the wireless phone anywhere on the extensive AT&T wireless systems for the same price with no roaming or additional long distance charges. As with the Sprint plans, AT&T offers numerous vertical features with the plan, although many of those features are only available in PCS areas, and the phone can be used for voice service over analog cellular and digital cellular. AT&T also offers PCS plans for as low as \$24.99 for 100 minutes.

AT&T also offers a service called Personal Network, which is an example of bundling. Personal Network allows the residential customer to combine wireless, long distance and Internet on one bill with potential cost savings based on plans and service. In addition, the plan allows for on-line billing with various sorting capabilities.

### **Voice and fax over IP**

During the course of the study, voice over Internet Protocol (VoIP), fax over IP (FoIP), and voice and fax over IP (V/FoIP) were seemingly moving from discussion and business Intranet applications into widespread implementation. This technology again illustrates the phenomenal speed with which the industry is changing. This section had to be almost continuously updated during the review in the summer 1999, because of the almost daily announcements of new products, technology and alliances. Again, Vantage fully anticipates that the VoIP and V/FoIP environment will have changes after completion of the draft report in September 1999 and its finalization. This is the environment in which BellSouth is now operating and which Commissions must be prepared for.

A sample of real world V/FoIP, currently available is the August 1999 offering from excite.com. Any user with Internet access can get FREE voice mail and fax service up to 60 messages per month just by signing and obtaining a user ID with excite.com (also free). The service requires that callers dial a toll free number (1-888-excite2) and then enter a 10-digit "extension" code. Vantage tests indicate that the voice quality of this voice mail service is very good. Other Internet portals are offering voice "chat " as this report goes to press.

### **Cable (COAX)**

Perhaps the most visible competition in the local network is from cable. Not only the long anticipated entrance of cable modems into the fray, but from the mergers and alliances which have taken place. More specifically, the purchase of cable giant TCI by AT&T. The purchase gives AT&T the potential entry into 33 million U.S. homes via the Coax cable already installed by the cable company.<sup>19</sup>

According to Kinetic Strategies Inc. which publishes Cable Datacom News, more than one million households in the U.S. and Canada now subscribe to cable modem services. Approximately 70 percent of these are in the U.S. According to the same source, 32 million households have access to cable modem service.<sup>20</sup>

In addition to providing high speed data transfer, cable has the capability of providing voice communications using only a fraction of the available bandwidth. Despite its promise, cable telephony faces significant requirements for capital in order to upgrade the network. The industry will need to spend \$15 billion by 2003 to reach 57% of cable homes and will need to spend an estimated \$31 billion to reach 100%.<sup>21</sup>

### **Cable (Satellite)**

Satellite television offers the potential of providing not only digital entertainment, but also high-speed Internet services. As an example, in June of this year, AOL and Hughes Electronics Corporation announced a strategic alliance. The intended outcome of the alliance is to:

*"...accelerate subscriber growth and revenue-per-subscriber for Hughes' DIRECTV® television entertainment service and DirecPC® satellite-based broadband Internet delivery system, as well as extend the reach of America Online's developing AOL TV interactive television and high-speed AOL-Plus services."<sup>22</sup>*

This alliance brings access to 16 million AOL and CompuServe members in the U.S. AOL gains access to the seven million DIRECTV® customers for AOL TV services. The alliance will make AOL-Plus broadband service available via the satellite network by early 2000. The current technology for this service uses a standard telephony uplink with a satellite broadband download. The download is touted to be as much as 14 times faster than a standard 28.8 Kbps analog modem. These services directly compete with DSL and ISDN service offerings which provide high-speed capacity.

### **Technology Competition**

In *Exhibit III-5*, below, we have summarized some of BellSouth's service offerings that are coming under or are under competitive pressure.<sup>23</sup>

**Focused Review of the Price Regulation Plan  
BellSouth Telecommunications, Inc. - Kentucky**

**Exhibit III-5<sup>24</sup>  
Technology Competition**

<b>Product/Services and Technology Summary<sup>25</sup></b>				
<b>Product/Service</b>	<b>Basic rate ISDN BRI</b>	<b>Primary Rate Interface PRI</b>	<b>Frame Relay</b>	<b>ATM</b>
Target Markets (Bold Indicates primary market)	<b>Large Customer</b> Mid-Market Small Business Consumer	<b>Large Customer</b> Mid-Market Small Business	<b>Large Customer</b> Mid-Market Small Business	<b>Large Customer</b> Mid-Market Small Business
Market Competition	Large Customer Mid-Market Small Business	Large Customer Mid-Market	Large Customer Mid-Market	Large Customer
BellSouth facilities used to provide service	ISDN Equipped CO DSL Access Line	ISDN Equipped CO Copper or fiber DS1 line. ISDN Network Termination	At least one Central Office in the Network Serving Area must be a Frame Relay switch. (Ascend/Cascade 9000 switch.) Customer connections may be provided over fiber or copper depending on speed. Interoffice facilities are direct fiber or fiber rings. Digital Cross Connect for speeds less than 1.536Mbps. All Frame Relay switches are connected via DS1 to BST Network Administration System (in Atlanta)	At least one Central Office within a Network Serving Area must house an ATM switch. (ATM CBX 500 switch) Customer connections may be provided over fiber or copper depending on speed. Interoffice facilities are direct fiber or fiber rings. All ATM switches are connected via DS1 to BST Network Administration System (in Atlanta)
Special Customer Facilities Required	Requires ISDN capable customer premise equipment.	ISDN CPE. CPE, Network Termination and Exchange Termination (ISDN CO) must match exactly in configuration and protocol.	Broadband Exchange Line Frame Relay Service Customer Connection Broadband Exchange Line Extension if outside the Network	Broadband Exchange Line ATM Customer Service Connection Broadband Exchange Line Extension if outside the Network Serving Area

Primary Kentucky Competitors	Hyperion e.spire Community Telephone*	AT&T MCI ICG Hyperion e.spire Community Telephone*	AT&T MCI ICG ICI e.spire Community Telephone*	AT&T MCI e.spire
How do competitors provide service?	Facilities based and resale. Unbundled provision requires 2 wire ISDN port, 2-B Channels, 1-D Channel and the 2 wire ISDN loop.	AT&T equivalent is offered almost exclusively through CLEC switches, wires and terminating equipment although it is available for resale. Can be offered through a combination of unbundled elements and CLEC facilities. This would require a 4-wire DS1 digital loop and 4-wire ISDN DS1 port.	Through CLEC facilities or by purchase of unbundled local loop and transport elements combined with CLEC Frame Relay switch.  Frame Relay is available for resale.	Through CLEC facilities. ATM switches may be collocated at BellSouth Co.'s or elsewhere. ATM is available for resale.
Notes	BRI offered to both business customers (IBS) and residential (IRS). IBS allows special channel configuration. There is no mileage limitation on BRI and it is compatible over subscriber line carrier systems.		Frame Relay available at 56 Kbps, 64 Kbps, 128 Kbps, 1.536 Mbps, 44.210 Mbps. Fractional connections available at 128 Kbps and 1.536 Mbps. ATM and Frame Relay are connection oriented packet-switched technologies.	ATM available at 1.536 Mbps, 44.210 Mbps, 149.760 Mbps and 599,040 Mbps. ATM and Frame Relay are connection oriented packet-switched technologies.



Product/Services and Technology Summary				
Product/Service	ADSL	Centrex	Megalink	Lightgate
Target Markets (Bold Indicates primary market)	ADSL is marketed to Network Service Providers (NSPs) who sell the service to their customers.	Large Customer Mid-Market Small Business	Large Customer Mid-Market Small Business	Large Customer Mid-Market
Market Competition	Large Customer Mid-Market Small Business Consumer	Competition for both Centrex replacement of PBX and for PBX trunks in all of the above markets.	Large Customer Mid-Market	Large Customer Mid-Market
BellSouth facilities used to provide service	BellSouth provides ADSL to the NSP via in service facilities and ATM service and appropriate transport.	Provided via central office via station lines. Customer Provided Equipment apparatus provides access from Co. to local and long distance networks.	Megalink local and interoffice facilities at 1.544 Mbps. Although not technically facilities, MegaLink also requires various services in the terminating Co.	Fiber optic single mode cable. Optical multiplexing terminals at each end of facilities. May require D4 channel banks and circuit specific plug-in equipment for certain customer requested services.
Special Customer Facilities Required		Customer Provided Equipment station apparatus to terminate station line facilities.	Customer Provided Equipment to digitize and encode functions and to provide switching and multiplexing.	None.
Primary Kentucky Competitors	BellSouth.net provides ADSL.** Competitors are BlueStar and DSL.net.	AT&T ICG Hyperion e.spire Community Telephone* Southeast Telephone*	ICG Hyperion e.spire These three CLECS offer DS0,DS1 and DS3 level service. Numerous other smaller CLECS offer similar private line services in Eastern and Western Kentucky.	ICG Hyperion e.spire These three CLECS offer DS0,DS1 and DS3 level service. AT&T partner with CLECS. Numerous other smaller CLECS offer similar services in Eastern and Western Kentucky.
How do competitors provide service?	NSPs collocate in BellSouth CO and buy loops from BST or a CLEC.	PBX is provided by customer premises equipment. Centrex can be provided by combining 2 wire analog loop	Available for resale. Can be provided with UNEs. Requires 4 wire DS1 loop and the 4 wire interoffice transport..	Available for resale. UNEs would require a BFR. Louisville CLECS offer primarily through their own facilities.

	<p>CLECs can also provide ADSL using two and four-wire UNEs. ADSL is not available for resale.</p>	<p>and CLEC switch. Also available for resale.</p>	<p>Louisville CLECs offer primarily through their own facilities. Eastern and Western Kentucky CLECs provide through their own services.</p>	
<p>Notes</p>	<p>Intermedia cable company offers cable modems as an alternative to ADSL.</p>		<p>Allows for various configurations at the customer request.</p>	<p>LightGate is offered in two asynchronous capacity sizes, a single DS3 capacity offering 28 DS1 channels or 672 voice grade channels or a three DS3 capacity with up to 84 DS1 channel or 2016 voice grade channels.</p>

\*Western Kentucky competitor

\*\* Fast Access



The technologies summarized above also represent the areas where revenue and customer growth is expected in the future.

### **Kentucky Information Highway (KIH)<sup>26</sup>**

The KIH is a statewide integrated communications and information network using a digital network for high speed, high capacity delivery of voice, data and video transmissions. The Commonwealth of Kentucky entered into a 10-year contract in 1995 for the KIH, with BellSouth as the prime contractor. BellSouth, along with 19 other local exchange companies and Qwest/LCI International, teamed to develop and implement the network.

The goal of the KIH is to provide access to public information, educational resources, health resources and agency provided services in urban and rural locations. The KIH does this by supporting educational and healthcare initiatives across the state, linking local communities to the state capital, and providing expanded access to Internet service providers.

#### **KIH Facilities and Rate Structure**

The KIH partners have deployed a fiber optic backbone, 12-Frame Relay and 6 ATM switches for delivery of KIH services. KIH charges are distance insensitive so schools in outlying areas pay the same rates as schools in urban areas. A simplified rate structure consists of an on ramp in every county. An access fee is billed for the portion of the network from the end user's premise to the servicing wire center.

#### **KIH Service Delivery**

KIH has taken part in a number of diverse and innovative telecommunications solutions in Kentucky. Some of these include:

- The Model County project which provides communications connections between local offices and state governments agencies. Applications utilized include Internet access, e-mail, and file transfer.
- The Kentucky Tele-Linking Network (KTLN) is a voice, video, and data network that has been expanded throughout the state using KIH for connectivity. KTLN links schools, colleges, universities and public and private agencies for delivery of services. Every district school office in the state is linked back to the Department of Education in Frankfort.
- Empower Kentucky is a broad based effort that will use KIH and other resources to improve the efficiency and delivery of state government services to constituents.

- The Workers Information SysTem (TWIST) Project is an automated social services case information system. Programs include child protection, foster care, adoption, juvenile and adult protection. The information is available 24 hours per day/7 days per week. Information is stored and retrieved over the KIH Frame Relay network
- The Cabinet for Health Care Services (CHS) is involved in a redesign of the Local Health Network to eliminate redundant data collection and provide shared access. All public health care facilities will connect to KIH for such data as birth and death certificates, immunization records, lab tests, patient demographics etc.

### **KIH Accolades**

The KIH has recently received several awards. The KIH was nominated for the Computerworld Smithsonian Award and inducted into the Smithsonian's National Museum of American History on April 12, 1999. The award is based on utilization of new information age tools to extend the benefits of technology to society. KIH also won a 1999 Recognition Award for Outstanding Achievement in the Field of Information Technology from NASIRE, which represents Chief Financial Officers of the States. The award was in the category of Public-Private Partnerships.

### **FINDINGS AND CONCLUSIONS**

**III-F1**     The Commission must prepare for and understand markets and services outside their direct regulatory control.

The future of telecommunications has broadened far beyond just the services provided by the LECs through twisted copper. As we have pointed out, customers (including residential customers) will or already have access to telecommunications services through the ILEC public switched network, V/FoIP, cable modem, and wireless services. In many cases, customers will have access to services from all these delivery mechanisms from multiple competing providers.

The future will hold considerable uncertainty for the customer. They will look to the Commission for guidance and complaint resolution. History has shown that many customers will not understand the changes taking place in the industry. To this day, many customers do not understand the difference between their long distance carrier and the local phone company. This confusion will be magnified many fold as customers encounter bundled services, the same service offered through different technologies, and one provider offering services, heretofore, always considered separate. (For example, cable and phone service from one company.)

**III-F2**     The Commission must be prepared for the problems that competition may bring.

A significant issue that came out of our case study of King's Deer Telephone was the potential replacement of one facility monopoly with another. In a dense urban residential area, this problem is not a major concern because facilities could be built out with relative ease if residents wished to be provided alternative service. However, in a more rural and

less populated area, if a CLEC were to have the only facilities in place, then the problem is much larger. This is an example of an issue that has never even arisen in the past. The Commission must prepare for such issues as:

- Can the ILEC forego its obligation as carrier of last resort if a CLEC is serving an entire area with its facilities?
- How will USF and Lifeline funds be distributed?
- How can the Commission ensure service quality from CLECs? Even with regulations to require reporting, how will the Commission enforce such regulations?
- Slamming and cramming continue to be a problem with long distance charges. What is to suggest that local competition will be spared this problem? If anything, the problem may be magnified.
- How can the Commission be sure that customers receive credit when switching from one carrier to the next during a billing cycle? BellSouth and the large IXCs (soon to be CLECs) will, undoubtedly, provide credits as part of ongoing business practice, but what of CLECs who lose customers back to BellSouth?
- Billing issues have been major problems with Telcos in the past. The large IXCs and RBOCs have resolved these, but how can the Commission control the multitude of billing formats, cutoff, procedures etc. that could potentially face the customer?

There is no good answer to many of these and other potential problems because they have not yet been faced. Also, many of these problems may be beyond the Commission's jurisdiction, which may only serve to further confuse the ratepayer. Fortunately, there is time to prepare for the details of the problems that will be encountered.

**III-F3**     The total role of BellSouth in state economic development must be considered.

BellSouth (and most other RBOCs) makes a number of contributions to the economy of the state beyond their obvious payroll and infrastructure contributions. In a new competitive environment, many of the CLEC's will not be willing or able to make these same contributions. Vantage is not making the argument that BellSouth or any other competitor should receive regulatory favoritism as a result of social contributions. However, the extent of the contributions to the state cannot be ignored. *Exhibit III-6*, below, summarizes BellSouth contributions over the 1995-1999 period.

**Focused Review of the Price Regulation Plan  
BellSouth Telecommunications, Inc. - Kentucky**

**Exhibit III-6<sup>27</sup>  
Contributions By Category (\$000)**

Year	Cash	Memberships	Voluntary Payments		
			General Company Benefit	Specific Organization Benefit	Stimulation of Business
1995	564	171	238	28	46
1996	560	214	273	4	22
1997	559	153	244	1	76
1998	582	154	265	0	63
1999	238*	60**	81*	0*	16*

\*Through 8/15/99.

\*\*Through 8/17/99.

This says nothing of the Telecommunications Research Center or the Kentucky Information Highway. The Kentucky Information Highway (KIH) is a statewide digital network for high-speed, high capacity delivery of voice, data, and video transmissions. The KIH was discussed in more depth in the main body of this chapter. BellSouth has also been a major contributor to business development efforts including the Telecommunications Research Center on the University of Louisville's Shelby Campus and the Paducah Information Park.

**III-F4**     The argument that competition does not exist because of low penetration of access lines is specious.

The number of access lines served by competitors of BellSouth (or any ILEC), is often used as an argument that competition does not exist in the state or in any state in the U.S. This is misleading and points more to the economics of providing service in an unregulated environment than it does to the openness of markets to competition.

Full blown competition with multiple providers using multiple technologies has not yet entered the residential marketplace because of a multitude of factors. Cable modems and Section 271 approval should shortly change this situation. Competition has benefited the business market first because these customers offer higher revenue per facility cost. Wireless service is not just a supplement, but a very real alternative to landline service. Wireless data services remain costly because of end user equipment, but the cost of wireless voice service has dropped appreciably.

In fact, competition is far too broad a term. Each market and category of service must be looked at separately in terms of competition. The large business customer most certainly has seen competition at the "local" level. Medium and smaller businesses are beginning to

see competition primarily for high-speed access and multiple lines. Some smaller businesses that happen to reside in buildings served by CLEC facilities (such as on a fiber ring) may also be seeing competition. The term "may" is used because there is no reasonable means of obtaining reliable information on the extent of competition. The unregulated competitors are not required to file such information.

**III-F5**     The residential POTS customer with no enhanced services and little long distance usage is not likely to see any noticeable reduction in rates as a result of competition.

Competition will come to the residential Kentucky customer, but not all customers will benefit from the competition in terms of reduced rates or even enhanced services. This is especially true for the rural customer (or perhaps more appropriately the customer in low density areas) for whom the cost of providing phone service is greater than the revenue under current regulatory pricing.

Just as pure economics have determined that business customers would be the first to see telephony competition, so too will economics determine that high usage residential customers are the first to see advantages of competition. Opportunities for competitors to profit in the residential marketplace come from the bundling of multiple services. Those customers who utilize not only voice, but some additional combination of Internet, high usage long distance, wireless, paging, and cable television provide the immediate targets of opportunity for the competitors in the residential market. For example, Qwest announced in August that it would give "free" Internet access to customers who sign up for special long distance services.<sup>28</sup> As previously noted, Sprint offers reduced rates on bundled long distance and Internet service.<sup>29</sup> Ironically, the recent heated competition in long distance rates for residential customers may mean even less opportunity for reductions with bundled services as revenues are being driven out of the long distance component.

## RECOMMENDATIONS

**III-R1**     The Commission needs to develop a formal plan for how it plans to deal with competition at the residential level. (Refer to Findings III-F-1 and III-F2.)

This plan would include:

- Service guidelines to be applied equally to CLECs and ILECs.
- Means of disseminating information to new competitors.
- Plans for dealing with service complaints on non-regulated companies.
- Education plans for Commission staff to enable them to function efficiently in the new environment.

**III-R2**     The Commission needs more open dialog with BellSouth and its competitors. (Refer to Findings III-F3 and III-F4.)

The Commission should work with not only BellSouth, but also the IXC's, the CLECS, cable, wireless providers, and others to identify potential problems and resolve them in a cooperative manner.



## IV. BELLSOUTH PERFORMANCE DURING PRP PROGRAM

### A. FINANCIAL PERFORMANCE

This section of the BellSouth Telecommunications - Kentucky Report details the revenue and expense changes from 1995 through 1998 to show an overall perspective of BST-KY financial performance. This section analyzes:

- Revenue and Expense Activity
- Asset Depreciation
- Employee Changes
- Access Line Growth
- Capital Investment

### REVENUE AND EXPENSE ANALYSIS

#### Revenues

*IV-F1*     Increased revenues result from additional access lines and increased demand for calling features by customers.

Revenues are increasing most significantly in the largest revenue category, Local Service Revenue. In 1998, Local Service Revenue comprised 81% of total revenues for BellSouth-Kentucky (Intrastate revenues only). *Exhibit IV-1* shows the amount of Local Service Revenues, as compared to the other revenue categories.

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#### Focused Review of the Price Regulation Plan BellSouth Telecommunications, Inc. - Kentucky

#### Exhibit IV-1<sup>30</sup> 1998 Revenues by Category

Revenue Category	Amount	Percent
Local Service Revenue	\$469,645	81%
Network Access Revenue	\$48,882	8%
Unidirectional Long Dist. Revenue	\$4,110	1%
Long Dist. Private Network Revenue	\$34,171	6%
Miscellaneous Revenue	\$28,042	5%
Uncollectible Revenue	\$4,827	(1)%

---

Local Service Revenue has increased approximately \$75 million, from 1995 to 1998, as shown in *Exhibits IV-2* and *IV-3*. The other revenue categories are flat or decreasing, as

shown in *Exhibit IV-2*. In 1996 over 1995, and 1997 over 1996, the decreases in the other revenue categories almost completely offset the increases in Local Service Revenue, as shown in *Exhibit IV-2*, increasing .89% and 1.18%, respectively. In 1998 versus 1997, total revenue increased by 3.99% representing more than \$20 million.<sup>31</sup>

**Focused Review of the Price Regulation Plan  
BellSouth Telecommunications, Inc. - Kentucky**

**Exhibit IV-2<sup>32</sup>  
1995-1998 Revenue and Percent Changes  
(\$ in 000's)**

(\$000s & %)	1995	% 96vs95	1996	% 97vs96	1997	% 98vs97	1998
Local Service Revenue	394,150	6.51%	419,823	5.78%	444,105	5.75%	469,645
Network Access Revenue	49,217	-7.18%	45,681	7.91%	49,296	-0.84%	48,882
Unidirectional Long Dist. Revenue	6,350	-9.92%	5,720	-12.57%	5,001	-17.82%	4,110
Long Dist. Private Network Revenue	62,772	-17.04%	52,076	-17.40%	43,016	-20.56%	34,171
Miscellaneous Revenue	38,498	-16.53%	32,133	-35.31%	20,786	34.91%	28,042
Uncollectible	(4,566)	-9.05%	(4,153)	6.72%	(4,432)	8.91%	(4,827)
Total Revenue	546,421	0.89%	551,280	1.18%	557,772	3.99%	580,023

In 1996, Local Service Revenue increased by approximately \$26 million (6.51%) from 1995. This increase was offset by other decreases and total revenues increased by less than the increases in Local Service Revenue, approximately \$4.9 million (0.89%). In 1997, Local Service Revenues increased approximately \$24 million (5.78%) but, again, was offset by other decreases and total revenues increased by a lesser degree, approximately \$6.5 million (1.18%). In 1998, Local Service Revenue increased approximately \$26 million and total revenue increased approximately \$22 million.<sup>33</sup>

*Exhibit IV-3* takes the Local Service Revenue category and details the component increases and decreases of that account.

**Focused Review of the Price Regulation Plan  
BellSouth Telecommunications, Inc. - Kentucky**

**Exhibit IV-3<sup>34</sup>  
Local Service Revenue Detail  
(\$ in 000's)**

	1995	% 95 v 96	1996	% 96 v 97	1997	% 97 v 98	1998
5001: Basic Area Revenue	241,893	1.07%	244,482	7.34%	262,420	3.93%	272,748
5002: Optional Extended Area Revenue	20,657	29.12%	26,672	22.89%	32,776	16.23%	38,095
5003: Cellular Mobile Revenue	0	-	0	-	0	-	0
5004: Other Mobile Service Revenue	16	0.00%	16	12.50%	18	0.00%	18
5010: Public Telephone Service	11,990	-1.91%	11,761	-68.81%	3,668	-100.00%	
5040: Local Private Line Revenue	15,708	12.66%	17,696	15.85%	20,500	24.01%	25,423
5050: Customer Premises Revenue	3,688	4.47%	3,853	-1.61%	3,791	-5.75%	3,573
5060: Other Local Exchange Revenue	100,679	14.54%	115,316	4.85%	120,907	7.33%	129,767
5069: Other Local Exchange Revenue Settlements	27	0.00%	27	-7.41%	25	-16.00%	21
<b>Summ of 5001 - 5069:</b>	<b>394,658</b>	<b>6.38%</b>	<b>419,823</b>	<b>5.79%</b>	<b>444,105</b>	<b>5.75%</b>	<b>469,645</b>

\* Public Telephone was deregulated in 1997 and moved to another account for part of 1997 and 1998.

The largest dollar increase, approximately \$31 million from 1995 to 1998, is noted in the Basic Area Revenue category. This increase is driven by the increase in access lines, 199,000 since 1995 or a 17% increase. The next largest increase is in the Other Local Exchange Revenue category. This category is comprised of the Complete Choice features or Custom Calling features, such as Caller ID and Call Waiting.<sup>35</sup>

### Number of Calls

The number of calls has been increasing steadily since 1995, as shown in *Exhibit IV-4*. Total Local Calls increased 4.5% from 1995 to 1998. IntraLATA Toll Calls increased 29.4% and total interLATA Toll Calls increased 27% during the same time period. Interstate, interLATA Toll increased 28.9%, 1995 to 1998, and 8.1% from 1997 to 1998. Intrastate interLATA Toll increased 20.9%, 1995 to 1998, and 7.9% from 1997 to 1998. The largest number of calls in 1998 is in the Total Local Calls category at 4,689,495,000.<sup>36</sup> *Exhibit IV-5* shows the percentage change in the number of calls by category. The category with the largest number of calls, Total Local Calls, shows a flat percent change of 3.87%, 0.13%, and 0.47% for 1995 versus 1996, 1996 versus 1997, and 1997 versus 1998. The largest percent change is an increase of 22.54% 1996 versus 1997 in the intraLATA Toll Calls. The changes for the previous and subsequent year in this category are more flat, increasing 4% and 1.56%, respectively.<sup>37</sup>

**Focused Review of the Price Regulation Plan  
BellSouth Telecommunications, Inc. - Kentucky**

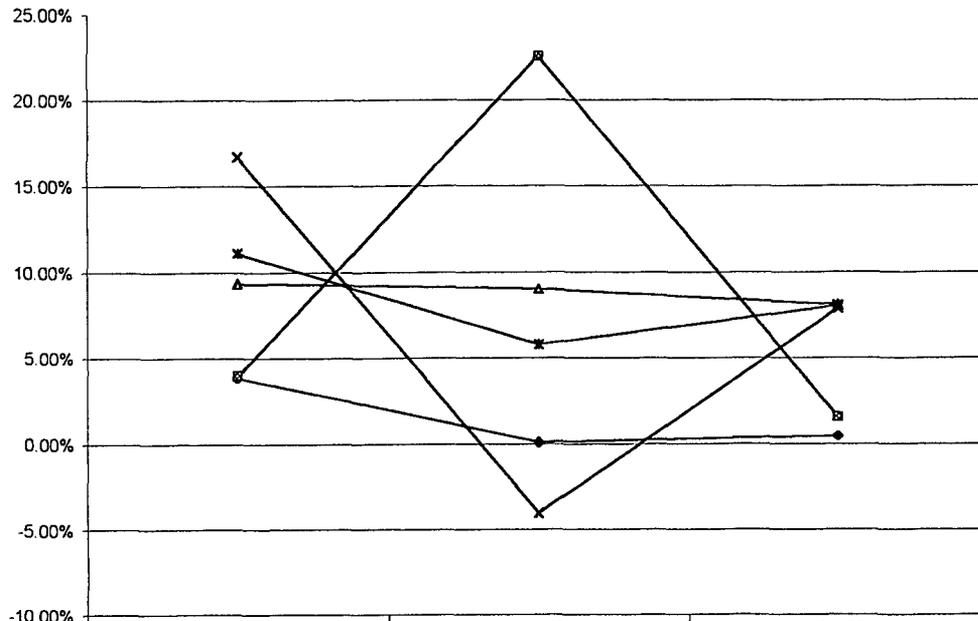
**Exhibit IV-4<sup>38</sup>  
Number of Calls and Billed Minutes  
(Amounts in 000's)**

	12/31/95	% 96v95	12/31/96	% 97v96	12/31/97	% 98v97	12/31/98	% 98 v 95
Calls								
Local	4,487,999	3.9%	4,661,683	0.1%	4,667,587	0.5%	4,689,495	4.5%
IntraLATA Toll	136,757	4.0%	142,226	22.5%	174,290	1.6%	177,007	29.4%
InterLATA Toll, Interstate	303,989	9.4%	332,547	9.0%	362,525	8.1%	391,910	28.9%
InterLATA Toll, Intrastate	94,038	16.7%	109,764	-4.0%	105,380	7.9%	113,725	20.9%
Total InterLATA Toll Calls	398,027	11.1%	442,311	5.8%	467,905	8.1%	505,635	27.0%
InterLATA Toll, Interstate	2,914,367	9.5%	3,191,324	8.6%	3,465,538	6.7%	3,696,851	26.8%
InterLATA Toll, Intrastate	844,071	22.2%	1,031,308	16.4%	1,200,813	15.4%	1,386,260	64.2%
Total InterLATA Toll Calls	3,758,438	12.4%	4,222,632	10.5%	4,666,351	8.9%	5,083,111	35.2%

As number of calls have increased, so have the number of billed minutes, as shown in Exhibit IV-4. Total interLATA Toll Calls Billed Minutes increased 35.2% from 1995 to 1998, and 8.9% from 1997 to 1998. Intrastate interLATA Toll Minutes increased 64.2% from 1995 to 1998 and 15.4% 1997 to 1998, easily the category with the largest increase.<sup>39</sup> Exhibit IV-6 shows a decline in the percentage increases, but each year represents an increase over the previous year. In the case of interLATA Intrastate Toll Minutes, these increases are 22.18%, 16.44%, and 15.44% for 1995 versus 1996, 1996 versus 1997, and 1997 versus 1998, respectively. In total, interLATA Toll Minutes increased by approximately 12%, 11%, and 9%, respectively, for the same time periods.<sup>40</sup>

**Focused Review of the Price Regulation Plan  
BellSouth Telecommunications, Inc. - Kentucky**

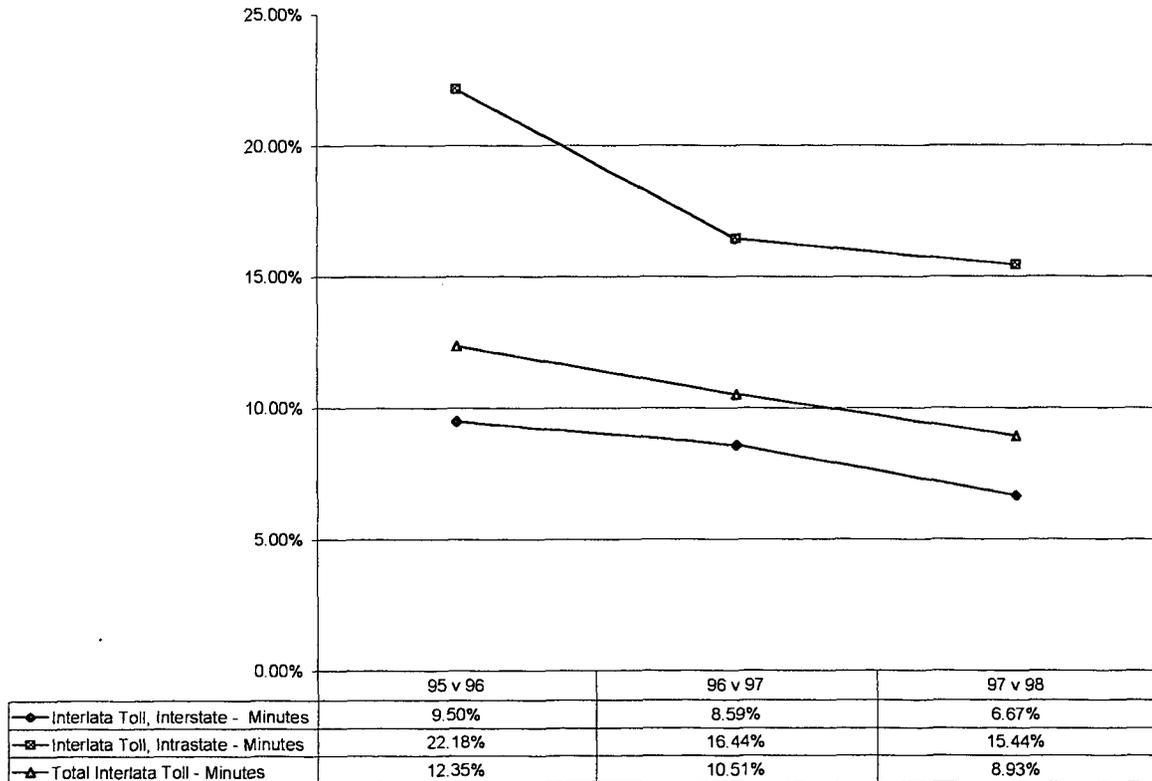
**Exhibit IV-5<sup>41</sup>  
Percent Change in the Number of Calls**



	95 v 96	96 v 97	97 v 98
◆ Total Local Calls	3.87%	0.13%	0.47%
■ Intralata Toll Calls - #	4.00%	22.54%	1.56%
▲ Interlata Toll, Interstate - #	9.39%	9.01%	8.11%
✕ Interlata Toll, Intrastate - #	16.72%	-3.99%	7.92%
✱ Total Interlata Toll Calls - #	11.13%	5.79%	8.06%

**Focused Review of the Price Regulation Plan  
BellSouth Telecommunications, Inc. - Kentucky**

**Exhibit IV-6<sup>42</sup>  
Percent Change in the Number of Billed Minutes**



## Expenses

Total operating expenses and taxes swing around year to year from 1995 to 1998, as shown in *Exhibit IV-7*. They increase by approximately \$3 million, 1996 over 1995, decrease by approximately \$17 million, 1997 over 1996, and decrease again by approximately \$0.5 million 1998 over 1997. The leading expense categories in dollar amounts are *Depreciation and Amortization, Customer Operations - Services, Corporate Operations - General and Administrative, and Operating Taxes*. These categories comprise 69% of the total operating expenses and taxes category in 1998, 67% in 1997, 67% in 1996, and 62% in 1995. A comparison of the increases and decreases in these largest categories is depicted in *Exhibit IV-8*.<sup>43</sup>

**Focused Review of the Price Regulation Plan  
BellSouth Telecommunications, Inc. - Kentucky**

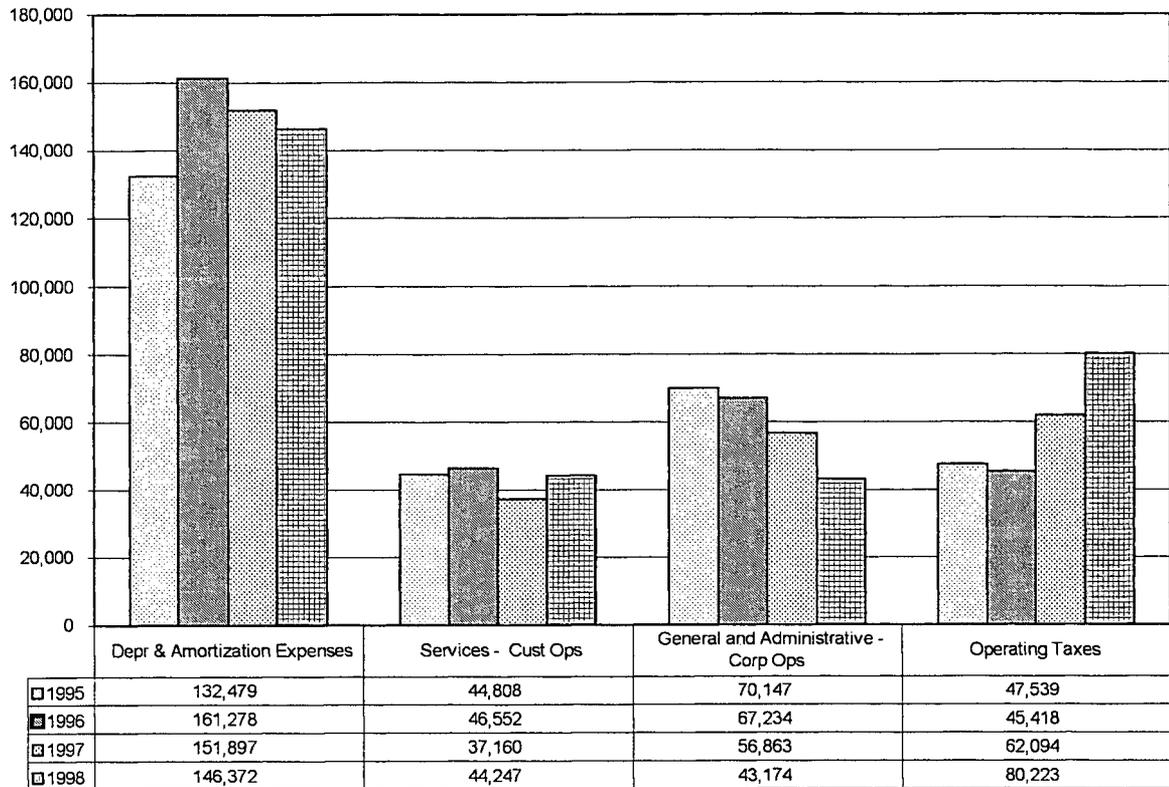
**Exhibit IV-7<sup>44</sup>  
Operating Expenses and Taxes  
(\$ in 000's)**

	1995	% 95 v 96	1996	% 96 v 97	1997	% 97 v 98	1998
Network Support Expense	997	-9.33%	904	-25.11%	677	-86.41%	92
General Support Expense	25,951	-13.66%	22,405	-15.95%	18,831	-6.54%	17,600
Central Office Switching Expense	19,532	-15.54%	16,497	8.30%	17,866	-4.57%	17,049
Operator System Expense	357	-14.01%	307	242.02%	1,050	-62.57%	393
Central Office Transmission Expense	6,951	-2.09%	6,806	-4.16%	6,523	-9.80%	5,884
Inf. Orig./Term. Expense	5,615	-31.50%	3,846	-2.34%	3,756	4.18%	3,913
Cable and Wire Facilities Expense	36,401	-2.63%	35,442	1.25%	35,886	4.23%	37,403
Other Prop, Plant, & Equip. Expense.	238	72.27%	410	-54.63%	186	207.53%	572
Network Operations Expense	38,074	-16.22%	31,897	0.40%	32,024	-21.01%	25,296
Access Expense	23,616	-35.36%	15,266	1.96%	15,565	-1.03%	15,405
Depr. & Amortization Expenses	132,479	21.74%	161,278	-5.82%	151,897	-3.64%	146,372
Marketing - Cust. Ops	18,191	8.23%	19,688	-14.80%	16,774	3.93%	17,434
Services - Cust. Ops	44,808	3.89%	46,552	-20.18%	37,160	19.07%	44,247
Executive and Planning - Corp Ops	2,286	0.48%	2,297	-26.08%	1,698	95.76%	3,324
General and Administrative - Corp Ops	70,147	-4.15%	67,234	-15.43%	56,863	-24.07%	43,174
Prov. for Uncollect. Notes Rec. - Corp. Ops	0	-	0	-	0	-	0
Other Operating Expenses	(153)	-114.38%	22	-150.00%	(11)	-154.55%	6
Operating Taxes	47,539	-4.46%	45,418	36.72%	62,094	29.20%	80,223
<b>Operating Expenses and Taxes</b>	<b>473,029</b>	<b>0.68%</b>	<b>476,269</b>	<b>-3.66%</b>	<b>458,839</b>	<b>-0.10%</b>	<b>458,387</b>

Exhibit IV-8 shows that Depreciation and Amortization are clearly the largest single expense categories. The large increase 1995 to 1996, and subsequent decreases 1996 through 1998, reflects the asset life changes approved in the PRP. (See next section for additional details.) Exhibit IV-8 also shows significant decreases in *General and Administrative - Corporate Operations* reflecting decreased personnel 1995 through 1997. The personnel decrease also shows, to a lesser extent, in *Service - Customer Operations* category with a large decrease 1996 to 1997. *Service - Customer Operations* hit a low in 1997 of approximately \$37 million and increased to approximately \$44 million in 1998, while *General and Administrative - Corporate Operations* has steadily decreased from a 1995 high of approximately \$70 million to a 1998 low of approximately \$43 million.<sup>45</sup>

**Focused Review of the Price Regulation Plan  
BellSouth Telecommunications, Inc. - Kentucky**

**Exhibit IV-8<sup>46</sup>  
Major Expense Categories  
(\$ in 000's)**



**Focused Review of the Price Regulation Plan  
BellSouth Telecommunications, Inc. - Kentucky**

**Exhibit IV-9<sup>47</sup>  
Employee and Compensation Changes**

	1995	1996	1997	1998	Total
Total Employees	2,675	2,403	2,203	2,344	
Total Compensation	\$131,901,464	\$126,301,040	\$107,423,960	\$103,919,093	
Average Compensation per employee	\$49,309	\$52,560	\$48,763	\$44,334	
Employee Increase/(Decrease)		(272)	(200)	141	(331)
% Employee Increase/(Decrease)		-10.2%	-8.3%	6.4%	
Compensation Increase/(Decrease)		(5,600,424)	(18,877,080)	(3,504,867)	(27,982,371)
% Compensation Increase/(Decrease)		-4.2%	-14.9%	-3.3%	

**IV-F2** Numbers of employees decreased from 1995 to 1997 and then increased in 1998, while total compensation decreased almost \$28 million over the four-year time period.

*Exhibit IV-9*, above, shows that the number of employees decreased 10.2%, from 1995 to 1996, and 8.3% from 1996 to 1997, and then increased 6.4% from 1997 to 1998. In total, employees decreased by 331 from 1995 to 1998. Total compensation decreased from 1995 to 1998 from \$132 million to \$104 million. The largest decrease in compensation occurred in 1997 of almost \$19 million. Average compensation per employee fluctuated around \$48,000 and \$52,000, 1995 through 1997, and decreased to \$44,000 in 1998.<sup>48</sup>

### **Asset Depreciation**

**IV-F3** Depreciation expense for BellSouth Telecommunications - Kentucky increased in 1996 and then reduced to lower levels in following years.

As part of the PRP, BellSouth Telecommunications - Kentucky was allowed to re-estimate and reduce asset lives to more realistic lengths considering environmental and technological changes. Asset lives in the past were approved by the PSC, but not at this time. The asset life re-estimate had the effect of accelerating total depreciation. As a result, depreciation expense for BellSouth Telecommunications - Kentucky jumped up in 1996, increasing 22% over the previous year, as shown in *Exhibit IV-8*.<sup>49</sup> From 1995 to 1996, depreciation expense increased almost \$30 million. Depreciation expense for the following two years decreased approximately \$10 million and \$6 million, respectively, as shown in *Exhibit IV-10*.<sup>50</sup>

**Focused Review of the Price Regulation Plan  
BellSouth Telecommunications, Inc. - Kentucky**

**Exhibit IV-10<sup>51</sup>  
Depreciation Expense**

	1995	1996	1997	1998
Depreciation and Amortization Expense	132,479,000	161,278,000	151,897,000	146,372,000
Dollar Increase/(Decrease)		28,799,000	(9,381,000)	(5,525,000)
Percentage Increase/(Decrease)		21.7%	-5.8%	-3.6%

Depreciation expenses increased substantially with the approved asset life adjustment in the PRP and then reduced to more normal levels, as shown in *Exhibits IV-8 and IV-10*.

Depreciation is calculated using a remaining life formula. This calculation is performed using the asset value at 100%, minus the Asset's Reserve, minus the Asset's Future Net Salvage, all divided by the Asset's Average Remaining Life. The formula is self-correcting with each component included at its current level when the calculation is made.<sup>52</sup>

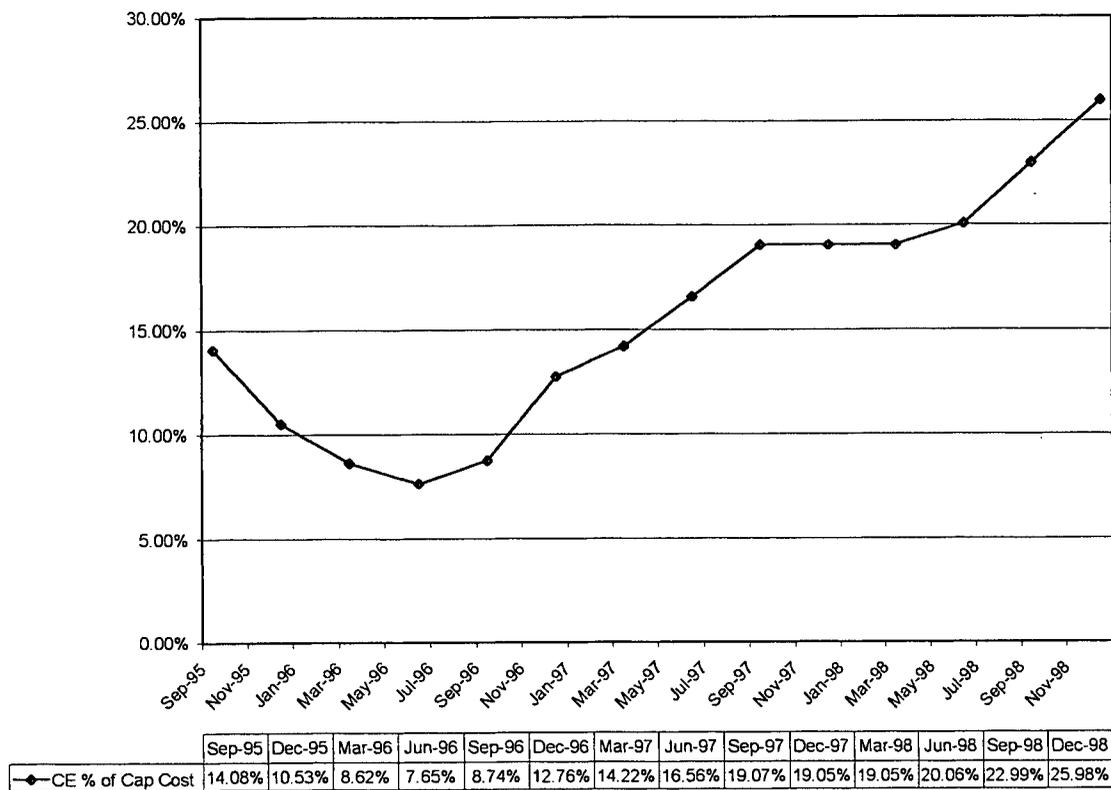
The Director of Capital Recovery was charged with determining the appropriate depreciation levels for BellSouth-Kentucky assets. His area, including four managers and ten support staff, conducted depreciation studies and financial studies to this end. He determined the appropriate depreciation rates and levels, including economic life and salvage rates. Depreciation is reviewed and recalculated on an ongoing, annual basis.<sup>53</sup>

### Rate of Return

*Exhibit IV-11, Common Equity Percent of Capitalization Cost, Exhibit IV-12, Net Operating Income, and Exhibit IV-13, Rate of Return on Shareholder's Common Equity*, each have the same general shape showing the same general trend. From 1995 to 1998, each of these figures or ratios shows a start at a middle range, a decrease into the middle of 1996, and then a gradual increase to the end of 1998. Each of these charts has an income component that reflects BellSouth - Kentucky's reduction in personnel and related expenses, decreasing depreciation expense (giving increasing income results year after year), and increased revenues in the local service revenue category. Each of these components were discussed above in the Revenue and Expenses section.

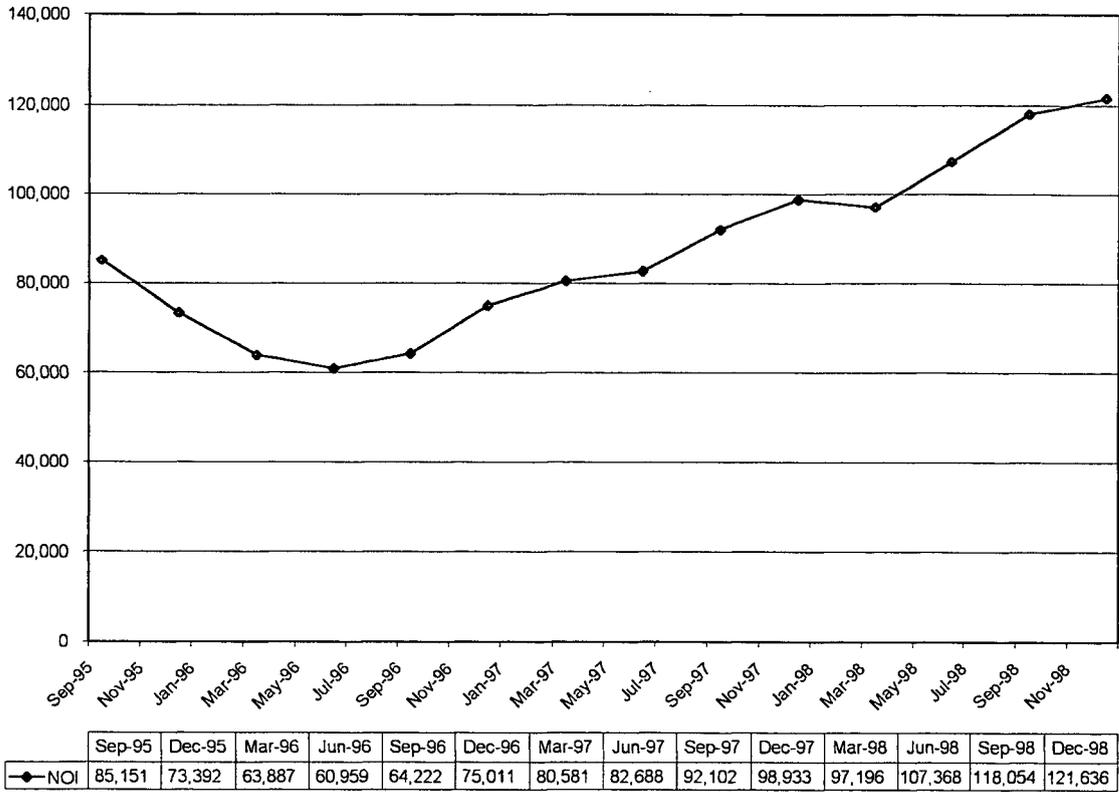
**Focused Review of the Price Regulation Plan  
BellSouth Telecommunications, Inc. - Kentucky**

**Exhibit IV-11<sup>54</sup>  
Common Equity Percentage of Capital Cost**



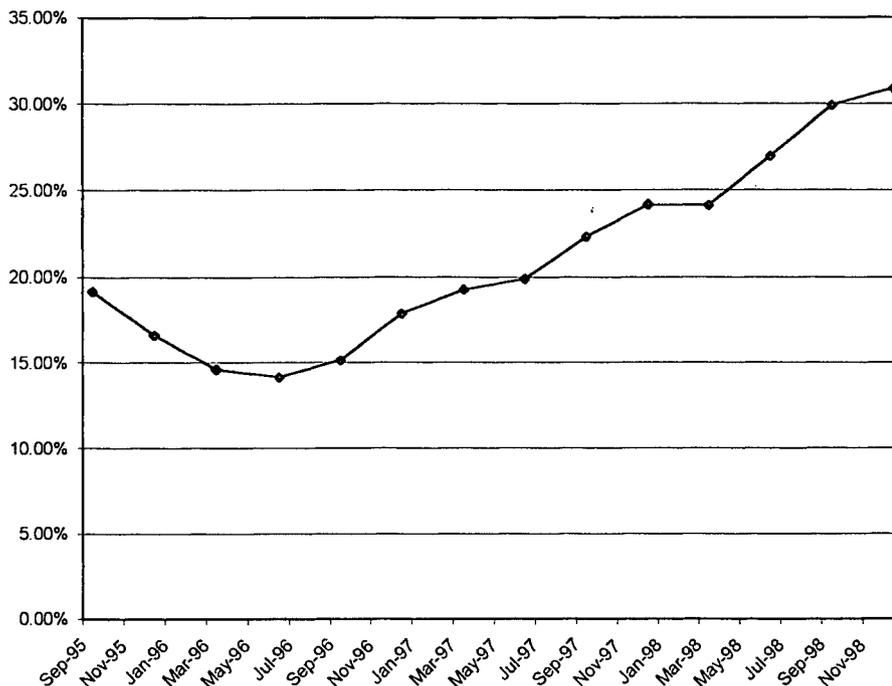
**Focused Review of the Price Regulation Plan  
BellSouth Telecommunications, Inc. - Kentucky**

**Exhibit IV-12<sup>55</sup>  
Net Operating Income 1995 - 1998**



**Focused Review of the Price Regulation Plan  
BellSouth Telecommunications, Inc. - Kentucky**

**Exhibit IV-13<sup>56</sup>  
Rate of Return on Shareholder's Common Equity**



	Sep-95	Dec-95	Mar-96	Jun-96	Sep-96	Dec-96	Mar-97	Jun-97	Sep-97	Dec-97	Mar-98	Jun-98	Sep-98	Dec-98
—●— ROR on S/H Common Equity	19.17	16.62	14.65	14.17	15.15	17.87	19.27	19.89	22.30	24.17	24.13	26.97	29.92	30.90

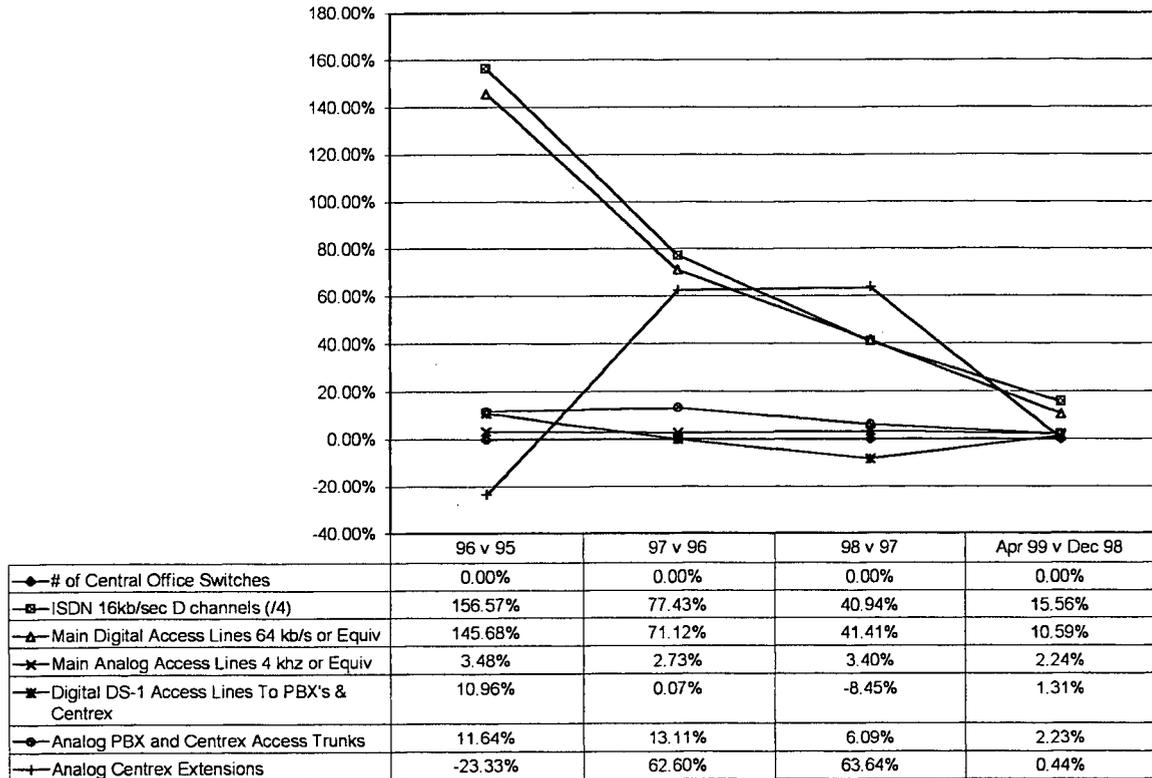
**Change in Access Lines**

As described earlier, revenues are increasing with increased access lines. Access line subscribership, by technology, are increasing in almost every category, as shown in *Exhibit IV-14*. When viewed by technological category, only a couple of decreases are noted since 1995. From 1997 to 1998, Analog Centrex Extensions increased 63.64%, similar to the previous year increase of 62.6%. The next largest increase was in the Main Digital Access Lines of 41.41%, down significantly compared to the previous year increase of 71.12%. The third largest increase is noted in the ISDN category of 40.94%, down from the previous year increase of 77.43%. From the end of the year 1998 to April 1999, Analog Centrex Extensions is flat, increasing 0.44%, while Main Digital Access Lines have increased 10.59% and ISDN have increased 15.56%. Digital DS-1 access lines were flat 1996 to 1997 and flat from end of the year 1998 to end of April 1999, while Main Digital Access Lines continues to grow at a decreasing rate. The largest number of lines by far is still the Main Analog Access Lines, totaling 1.1 million at the end of April 1999, as shown in *Exhibit IV-15*.

**Focused Review of the Price Regulation Plan  
BellSouth Telecommunications, Inc. - Kentucky**

**Exhibit IV-14<sup>57</sup>**

**Percentage Growth in Access Lines Listed by Technology**



BellSouth - Kentucky access line growth appears reasonable. The trends in access lines, by technology, are more reflective of what is occurring throughout the telecommunications environment than of any trends specific to Kentucky. The Central Office switches and analog access line growth is reflective of the demands of the underlying basic public switched network (as mentioned in the access line competition discussion in other chapter). ISDN line growth (both Basic Rate ISDN and Primary rate ISDN) has moderated as a result of competition and the availability of competing service offerings. For example, ADSL lines sold by BellSouth to ISPs are competing against ISDN for high-speed data connections. In another example, PBX and Centrex compete directly, as well as receiving competition from Intranet IP. The exact effect of cannibalization is difficult to differentiate from losses to competitors. Changes are only measurable if the customer switches services within BellSouth.

**Focused Review of the Price Regulation Plan  
BellSouth Telecommunications, Inc. - Kentucky**

**Exhibit IV-15<sup>58</sup>  
Number of Access Lines**

	Year-End/Period End				
	1995	1996	1997	1998	Apr-99
# of Central Office Switches	183	183	183	183	183
ISDN 16kb/Sec. D channels (/4)	601	1,542	2,736	3,856	4,456
Main Digital Access Lines 64 kb/s or Equivalent	475	1,167	1,997	2,824	3,123
Main Analog Access Lines 4 khz or Equivalent	991,636	1,026,149	1,054,131	1,089,972	1,114,390
Digital DS-1 Access Lines To PBX's & Centrex	70,111	77,793	77,848	71,272	72,208
Analog PBX and Centrex Access Trunks	29,132	32,523	36,787	39,027	39,897
Analog Centrex Extensions	11,429	8,763	14,249	23,317	23,420

### Capital Investment Growth

BellSouth Telecommunications capital investment in Kentucky has remained around 5% of total BellSouth Telecommunications capital investment for the last several years, as shown in *Exhibit IV-16*.<sup>59</sup> This was reiterated through the interview process by the CFO, Senior Director Regulatory Accounting, and State President - Kentucky.<sup>60</sup> Even though total dollars expended may vary up and down for BellSouth Telecommunications in total, BellSouth Telecommunications - Kentucky's piece of that has remained very steady for the last eight years. Since 1994, BellSouth Telecommunications - Kentucky expenditures as a percent of total BellSouth Telecommunications expenditures has not varied more than 2/10ths of a percent (varies between 5.2% - 5.4%). In other words, in the years of PRP regulation, Kentucky's percent of total BST Capital Expenditures is more stable than it has been in recent years. *Exhibit IV-17* focuses on Kentucky's percent of total BST Capital Expenditures. Previous to 1994, expenditures increased and decreased year-to-year to a much greater extent. Since 1995, however, the trend has been increasing capital expenditures with 1995 over 1994 being the slightest percent increase (0.20%) in capital expenditures year-to-year, and 1996 over 1995 being the largest (10.90%).<sup>61</sup>

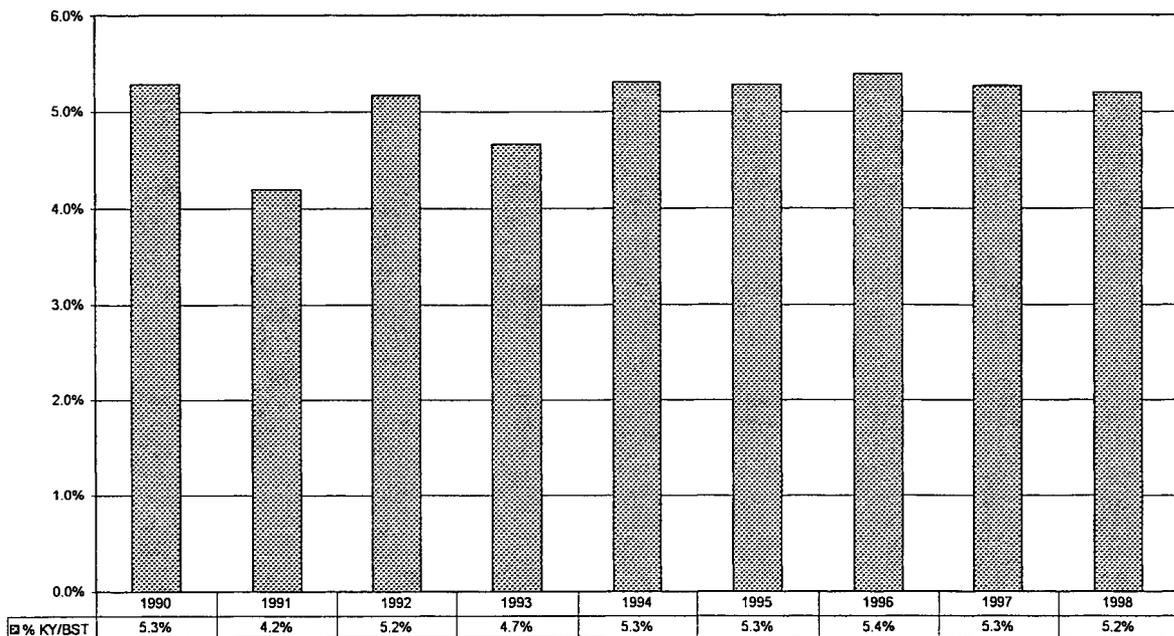
**Focused Review of the Price Regulation Plan  
BellSouth Telecommunications, Inc. - Kentucky**

**Exhibit IV-16<sup>62</sup>  
Capital Expenditures  
(\$ in 000's)**

	1990	1991	1992	1993	1994	1995	1996	1997	1998
Kentucky \$	130,920	98,620	123,710	113,970	128,130	128,340	142,360	152,230	153,530
Total BST \$	2,477,090	2,350,810	2,392,580	2,444,010	2,415,340	2,429,820	2,640,340	2,890,040	2,954,690
% KY/BST		4.2%	5.2%	4.7%	5.3%	5.3%	5.4%	5.3%	5.2%
KY Inc./Dec. Yr. to Yr.		(32,300)	25,090	(9,740)	14,160	210	14,020	9,870	1,300
% Age Inc./Dec Yr. to Yr.		-24.7%	25.4%	-7.9%	12.4%	0.2%	10.9%	6.9%	0.9%

**Focused Review of the Price Regulation Plan  
BellSouth Telecommunications, Inc. - Kentucky**

**Exhibit IV-17<sup>63</sup>  
Percent of Total BellSouth Telecommunications Capital Expenditures in Kentucky**



BellSouth Kentucky's new investment is estimated by reducing total BellSouth Telecommunications - Kentucky total capital investment by replacement capital, as shown in *Exhibit IV-18*. Kentucky's new investment decreased from 1994 to 1995 by approximately \$8 million or 6.9%. This corresponds to the small increase during the same time period in total Kentucky capital expenditures (0.20%, in *Exhibit IV-17*). Investment expenditures increased for the next several years. 1996 over 1995 increased almost \$19 million (17.45%), 1997 over 1996 increased almost \$11 million (8.36%), and 1998 new investment expenditures increased just over \$2 million (1.64%). Kentucky's new capital investment levels are depicted in *Exhibit IV-19* from 1994-1998.<sup>64</sup>

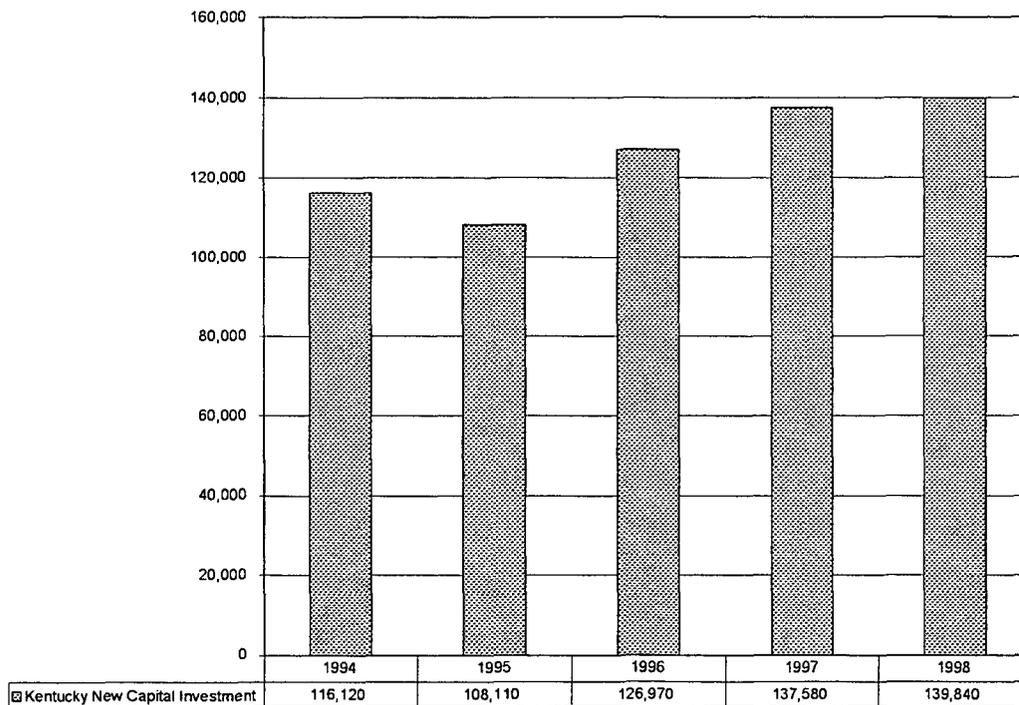
**Focused Review of the Price Regulation Plan  
BellSouth Telecommunications, Inc. - Kentucky**

**Exhibit IV-18<sup>65</sup>  
BellSouth Kentucky New Investment  
(\$ in 000's)**

	1994	1995	1996	1997	1998
Kentucky Capital Investment	128,130	128,340	142,360	152,230	153,530
Replacement Capital	12,010	20,230	15,390	14,650	13,690
Kentucky New Capital Investment	116,120	108,110	126,970	137,580	139,840
Inc/(Dec.) in new Investment		(8,010)	18,860	10,610	2,260
% Inc./(Dec.) in new Investment		-6.90%	17.45%	8.36%	1.64%

**Focused Review of the Price Regulation Plan  
BellSouth Telecommunications, Inc. - Kentucky**

**Exhibit IV-19<sup>67</sup>  
Kentucky New Capital Investment (\$ in 000's)**



Access lines and new investment for Kentucky is trending up 1995 through 1998, as shown in the table in *Exhibit IV-20*. From 1997 to 1998, new investment to access lines decreased resulting from a lower increase in new investment (1.64%) and a moderate increase in access lines (6.66%). From 1995 to 1998, new investment to access lines increased from \$93.05 to \$102.75, an increase of 10.42 % over four years.<sup>68</sup>

**Focused Review of the Price Regulation Plan  
BellSouth Telecommunications, Inc. - Kentucky**

**Exhibit IV-20<sup>69</sup>  
New Investment as a Percent of Access Lines**

	1995	1996	1997	1998
New Investment - estimated (\$000's)	108,110	126,970	137,580	139,840
% change		17.45%	8.36%	1.64%
Access Lines in Service (Switched & Special)	1,161,875	1,255,189	1,275,934	1,360,956
% change		8.03%	1.65%	6.66%
New Investment per Access Lines (\$)	\$93.05	\$101.16	\$107.83	\$102.75
% change		8.71%	6.59%	-4.71%

**IV-F4** Capital Investment has not decreased as a percent of revenues after the PRP was approved.

Capital Investment as a percent of revenues is relatively flat between 1995 and 1998, fluctuating between 23% and 27% for the years after the PRP, as shown in *Exhibit IV-21*.

**Focused Review of the Price Regulation Plan  
BellSouth Telecommunications, Inc. - Kentucky**

**Exhibit IV-21<sup>70</sup>  
Capital Investment as a Percent of Revenues  
(\$ in 000's)**

	1995	1996	1997	1998
Capital Investment	128,340	142,360	152,230	153,530
Revenues	546,421	551,280	557,772	580,023
Ratio	23.49%	25.82%	27.29%	26.47%

**IV-F5** There is no comparison between the PRP and increased or decreased capital expenditures in BellSouth Telecommunications - Kentucky.

Reviewing the previous analysis and charts, capital investment does not seem to be negatively effected by the PRP. *Exhibits IV-14 through IV-21* show steady increases in access lines, capital investment, and new capital investment. *Exhibit IV-21* shows relatively little change in capital investment as a percent of revenues. These areas have not been affected with the introduction or continuation of PRP regulation. Vantage Consulting Inc. found no evidence of any systematic decreases in capital investment as a result of the PRP. Access lines are up 17% from 1995. Capital investment in Kentucky, as a percent of BellSouth

Telecommunications capital investment, has been very steady since 1995, with variances of only 2/10ths of a percent. Both total Capital investment and new Capital investment in Kentucky have increased from 1995.<sup>71</sup>

BellSouth Telecommunications has stated that they propose "to invest sufficient network dollars over the next several years to provide for the necessary infrastructure to accommodate continuing excellent customer service and future technological communications innovation." They continue "The marketplace and customer's demands for services dictate how capital should be deployed, not the regulatory plan under which South Central Bell operates." This sentiment was restated throughout the interview process with financial personnel at BellSouth headquarters.<sup>72</sup>

The BellSouth CFO notes that all BellSouth states are price regulated. If a state was regulated using Rate of Return (ROR), this would possibly effect BellSouth's current decision-making process, which is regulatory plan neutral. As it is, the Regulatory Price Plans in each state are similar enough that this factor is not considered for company-wide policy and decision making.<sup>73</sup>

### **Capital Investment Decision Process**

*IV-F6*     The capital investment decision process has not changed relative to the PRP.

The BellSouth CFO describes the capital investment planning process as a load driven model, used to determine the total capital investment pool for BellSouth Telecommunications. That capital pool is then divided between states with inputs from the COU (Customer Operations Unit).<sup>74</sup> The inputs to the automated capital planning process were reviewed, noting no reference to the pricing factors contained within the PRP or the PRP at all. Specifically, the capital planning process divides expenditures into two categories: "Load" and "Plan". Load capital is dictated by customer demand for new access lines. Plan capital is driven by customer demand for new communications services and applications and by the need for improvements in the network infrastructure.<sup>75</sup>

As previously stated, according to the CFO, all BellSouth states have price regulation plans. Therefore, capital investment decisions do not need to take a regulatory plan into account in order to allocate investment dollars. As all states have similar regulatory plans, there is no differentiation on which to allocate monies.<sup>76</sup>

(Also, see capital investment expenditure analyses in *Exhibits IV-18* and *IV-19* above, noting that expenditures are not fluctuating with adoption of the PRP.)

## **B. OPERATIONAL PERFORMANCE**

This section will evaluate operation management policies and practices, as well as any changes resulting from price cap regulation. Of particular interest is whether a Kentucky price cap regulation or other factors is placing Kentucky at a disadvantage in terms of capital and technology. We will also examine pricing trends. An inherent and underlying basis for any operating or pricing decision is the direction BellSouth is going overall. Vantage discusses this direction as a lead-in.

## **BELLSOUTH FOCUS AND DIRECTION**

The most significant change in the philosophy of BellSouth management deals with market focus. It is impossible to talk with any BellSouth manager or executive without coming away with the clear understanding that data is the overwhelming driver of BellSouth's telecommunications future. Indeed, it is the driver of the entire telecommunications industry, not just BellSouth and not just within Kentucky.

The importance of this fundamental shift in BellSouth revenue and focus cannot be overemphasized. The shift reflects a fundamental change not only in BellSouth operations, but in the industry as a whole.

## **OPERATIONS**

All regional phone companies now operate in modes, which are sometimes oblivious to state boundaries. This is for efficiencies in team sizes, and in some cases, to congregate technical talent and/or facilities. This is organizationally efficient, but it can also be confusing to those unfamiliar with the organization. In the following section, we describe which operation centers provide service to Kentucky customers.

## **CONSUMER**

### **Operator Service and Directory Assistance**

BellSouth has eight Directory Assistance (DA) call centers. Three of these call centers take calls from Kentucky and Tennessee, four take calls from anywhere in the U.S. and one, in Owensboro Kentucky, takes calls originating outside Kentucky. (The Owensboro call center will eventually take calls from all parts of the U.S.) The locations, staffing, and areas served by the call centers are shown below in *Exhibit IV-22*.

**Focused Review of the Price Regulation Plan  
BellSouth Telecommunications, Inc. - Kentucky**

**Exhibit IV-22  
Directory Assistance Centers**

Location	Employees Handling Calls	States Served
Memphis, TN	210	TN/KY
Dickson, TN	114	TN/KY
Nashville, TN	191	TN/KY
Jackson, MS	141	All U.S.
Paducah, KY	102	All U.S.
Greenville, MS	61	All U.S.
Shreveport, LA	53	All U.S.

The Memphis, Dickson and Nashville centers answer 411 calls from Kentucky customers. The Jackson, Paducah, Greenville, and Shreveport offices answer 1+411 calls from all areas including Kentucky.

The Nashville and Jackson centers are 24-hour, 7-day per week operations. The other centers operate 7 days per week with various hourly schedules. BellSouth DA Call centers provide a good illustration, not only of modern call center "teams", but also provide a glimpse into the opportunities afforded communities by the modern telecommunications network. More specifically, call centers are large "virtual" teams, in which the location of the people answering the phones becomes just one of many variables in location decisions. Smaller communities with an adequate telecommunications infrastructure can not only compete for call center locations with larger communities, but are often more attractive.

### **Operator Services**

BellSouth has three operator services centers, as shown in *Exhibit IV-23* below:

**Focused Review of the Price Regulation Plan  
BellSouth Telecommunications, Inc. - Kentucky**

**Exhibit IV-23  
Operator Services Locations**

Location	Employees Handling Calls	States Served
Jackson, MS	100	AL/LA/MS/TN/KY
Huntsville, AL	46	AL/LA/MS/TN/KY
Knoxville, TN	66	AL/LA/MS/TN/KY

Both the Jackson, Mississippi and Knoxville, Tennessee centers are 24-hour/7-day per week operations. Huntsville operates from 7:00 a.m.-11:00 p.m. 7 days per week.

**Sales Centers**

Sales centers handle many of the functions that used to be referred to as the Business Office. (BellSouth operates Service centers, that handle other functions of the former Business Office). The sales functions for Kentucky consumers are handled totally with the Kentucky/Tennessee organization, as opposed to region-wide teams, which can be seen below in *Exhibit IV-24*.

**Focused Review of the Price Regulation Plan  
BellSouth Telecommunications, Inc. - Kentucky**

**Exhibit IV-24  
Sales Centers for Kentucky Consumer Customers**

Location	Employees Handling Calls	States Served
Louisville, KY	91	Kentucky/Tennessee
Columbia, TN	36	Kentucky/Tennessee
Chattanooga, TN	30	Kentucky/Tennessee
Jackson, TN	57	Kentucky/Tennessee
Nashville, TN	90	Kentucky/Tennessee

All of the consumer sales offices operate from 6 a.m. until midnight. Calls are not differentiated between centers by state or other feature.

**Service Centers**

Service Centers taking Kentucky customer calls are operated on a Kentucky/Tennessee team basis in that calls from any BellSouth customer in either state may be answered in any

of the call centers. This is shown in *Exhibit IV-25*, below. All of the call centers operate from 6 a.m.-Midnight, Monday through Saturday.

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**Focused Review of the Price Regulation Plan  
BellSouth Telecommunications, Inc. - Kentucky**

**Exhibit IV-25  
Service Centers for Kentucky Consumer Customers**

Location	Employees Handling Calls	States Served
Louisville, KY	93	Kentucky/Tennessee
Paducah, KY	101	Kentucky/Tennessee
Chattanooga, TN	108	Kentucky/Tennessee
Memphis, TN	103	Kentucky/Tennessee
Nashville, TN	196	Kentucky/Tennessee

---

**Repair**

Repair calls for Kentucky customers are taken during normal and extended business hours by a call center in Louisville with a staffing of 129. This center takes calls for Monday-Sunday from 7 a.m. until Midnight. A call center in Shreveport, LA takes overflow calls from the Louisville center and also from a repair call center in Birmingham.

**Collections**

BellSouth has three collections centers, which serve Kentucky customers. These centers and their staffing are as follows, as shown in *Exhibit IV-26*, below.

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**Focused Review of the Price Regulation Plan  
BellSouth Telecommunications, Inc. - Kentucky**

**Exhibit IV-26  
Collections Centers**

Location	Staffing	States Served
Louisville	38	Kentucky/Tennessee
Memphis	15	Kentucky/Tennessee
Nashville	12- Inbound 35- Outbound	Kentucky/Tennessee

---

The collections offices operate Monday through Saturday 6 a.m.-Midnight. (Early and late hours are for inbound only.) The outbound function is for direct proactive collection efforts. Inbound is for billing inquiry, treatment, and return of collection calls.

## **ISSC/BellSouth Solutions**

The new Integrated Sales and Service Center (ISSC), which is meant to sell and service integrated, bundled BellSouth products and services is located in Jacksonville, Florida. Current hours of operations are 9 a.m.-12 p.m., Monday through Friday. There are only four reps actually taking calls as of the end of August 1999. There are another 121 employees at the center undergoing training.

## **Alternate Channel Support Center-Regional**

This center provides support for questions sent by e-mail. The center is located in New Orleans and operates Monday-Friday and every other Saturday from 8 a.m.-6 p.m. The center has seven reps and one Assistant Manager.

## **Paging Support Group-Regional**

The Paging Support Group is located in Rome, Georgia. The center is staffed with 35 reps and hours of operation are 7 a.m.-6 p.m. and every other Saturday from 6 a.m.-Midnight.

## **Small Business Operations**

There are three primary functions supporting small business operations (on a standalone basis). These are:

- Sales and Service
- Collections
- Repair.

The locations, staffing, hours, and service area of the centers providing these functions are shown in *Exhibit IV-27* below.

**Focused Review of the Price Regulation Plan  
BellSouth Telecommunications, Inc. - Kentucky**

**Exhibit IV-2777**

**Kentucky Small Business Support Centers**

<b>Functions</b>	<b>Locations</b>	<b>Staffing Levels (Total)</b>	<b>Hours</b>	<b>Areas Served</b>
Small Business Sales and Service	Louisville, KY Knoxville, TN Memphis, TN	108	8:00-6:00 p.m. M-F	KY, TN
Small Business Collection Center	Huntsville, AL	94	8:00-5:00 p.m. M-F	AL, FL, KY, LA, MS, TN
Small Business Repair Centers	Louisville, KY Birmingham, AL Columbia, SC Sunrise, FL	225	24 hours 7 days/week	All BellSouth states.

**BellSouth Business (BB) Centers**

BellSouth Business focuses on larger business customers who are in need of special services and support. BellSouth Business operates with more centralized support centers. *Exhibit IV-28*, below, summarizes the primary centers.

**Focused Review of the Price Regulation Plan  
BellSouth Telecommunications, Inc. - Kentucky**

**Exhibit IV-28  
BellSouth Business Centers**

Department	Location	Hours of Operation*
Premise/Major Account Center**	Louisville, KY	8:30-5:00 EST
Mid-Market Tiers 1 & 2	Nashville, TN	8:00-4:30 CST
Mid-Market Tier 3	Birmingham, AL	8:00-5:30 CST
Vendor Service Center	Knoxville, TN	8:30-5:00 CST
TN/KY Business Repair	Nashville, TN	8:00-5:00 p.m. (Calls not answered in 2 seconds overflow to one of 27 positions in 3 BRCs.) After hours, calls also roll to these BRCs.
BSAC***	Each Customer has an 800 number	Atlanta

\* Monday-Friday unless noted.

\*\* Includes support to the Kentucky Information Highway.

\*\*\* Supports NetSource Customers, 3 IXC's and three MACs.

The Account-Executives-Mid Market are supported by the Nashville Center (see above Mid-Market Center). The Account Executives-Premise are located in Louisville (one is also located in Danville).

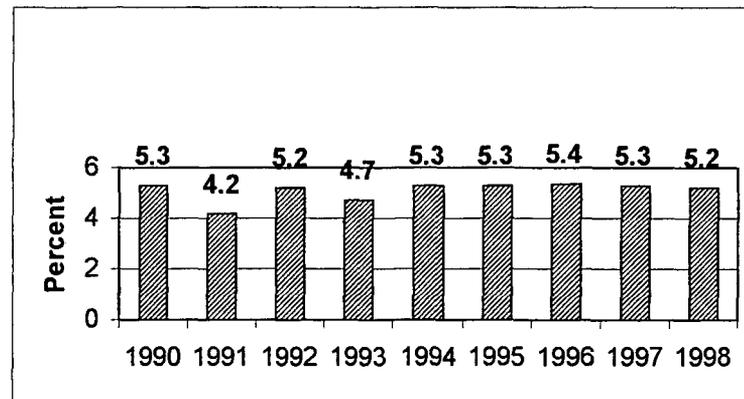
### Capital Construction

One area of critical concern in our review was the impact that the Kentucky PRP may have had on capital expenditures within BellSouth. One inevitable outcome of competition is that dollars must flow to those areas with the highest potential return. The return includes the normal business opportunities, but regulation also influences return and capital deployment. Vantage undertook to determine if the PRP had any definable negative impact on capital deployment in the state. (This is reviewed in more detail in *Section IV.C.*)

Over the nine-year period 1990-1999, the percentage of BellSouth capital invested in Kentucky remained consistently around 5%, as shown below in *Exhibit IV-29*.<sup>78</sup>

**Focused Review of the Price Regulation Plan  
BellSouth Telecommunications, Inc. - Kentucky**

**Exhibit IV-2979  
Kentucky Percent of BellSouth Capital**



While it may seem odd that the percent of capital has remained fairly constant during a time of rapid technological change, the factors underlying the numbers are logical. First, the number is a percentage of total BellSouth capital. The Kentucky percentage has remained fairly constant, which can be viewed as an indicator that the PRP has not driven capital away from Kentucky on a relative basis. Kentucky has approximately 5% of BellSouth access lines and it gets approximately 5% of capital investment. The second factor is the extent to which the PSTN still dominates spending and resources. For all of the press (and real actions) associated with new technology and with a packet switched network, there is still a huge investment in the existing public switched network that must be maintained. The existing PSTN also provided the pipeline for many of the new products and services that have been deployed. For example, Internet traffic still travels over basic voice grade lines, or in some cases ADSL lines for residential users. This points to both an advantage and a disadvantage to BellSouth and other CLECs on a going-forward basis. The advantage is that BellSouth does indeed have ownership of the critical and very expensive "last mile" of facilities over the PSTN. The disadvantage is that BellSouth must now, and in the future, continue to fund maintenance, upgrades, and new construction on these facilities, even as the facilities are being used by competitors. More importantly, this maintenance and upkeep must be done while BellSouth funds investment in packet-switching technology. Packet switched technology is necessary for data services which are expected to make up the preponderance of future growth in telecommunications. It is the technology and architecture of the future.

The actual amount of capital has risen over this same period from \$130.92 million in 1990 to \$153.5 million in 1998.

All BellSouth states operate under price cap regulation plans. For this reason, it is exceedingly difficult, if not impossible, to make comparisons between BellSouth states, in an

effort to identify differences attributable to the PRP. Based upon numerous interviews, Vantage did conclude that had Kentucky not entered into a PRP, BST-KY would most certainly have been at a disadvantage in terms of discretionary capital allocation from the corporate level. Again, the actual amount of the capital difference cannot be determined because the issue is moot. However, Vantage can state with a high degree of certainty that the PRP did not in any way reduce capital coming into the state for maintenance and repair.

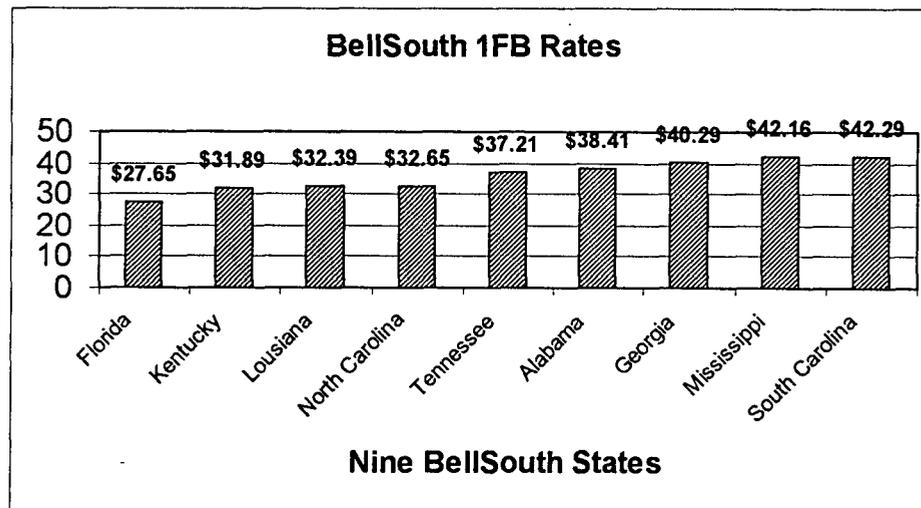
## PRICING OF SERVICES

### Regulated Services

Prices for single line business service in Kentucky is the second lowest in the BellSouth system at \$31.89. *Exhibit IV-30*, below, shows the distribution of rates across the BellSouth service territory.<sup>80</sup> As shown, the rates range from a low of \$27.65 in Florida to a high of \$42.29 in South Carolina.

### Focused Review of the Price Regulation Plan BellSouth Telecommunications, Inc. - Kentucky

Exhibit IV-30<sup>81</sup>  
BellSouth 1FB Rates



The rates shown are averages. There is a significant difference between the lowest and highest rates in the nine-state service territory, as shown below in *Exhibit IV-31*.

**Focused Review of the Price Regulation Plan  
BellSouth Telecommunications, Inc. - Kentucky**

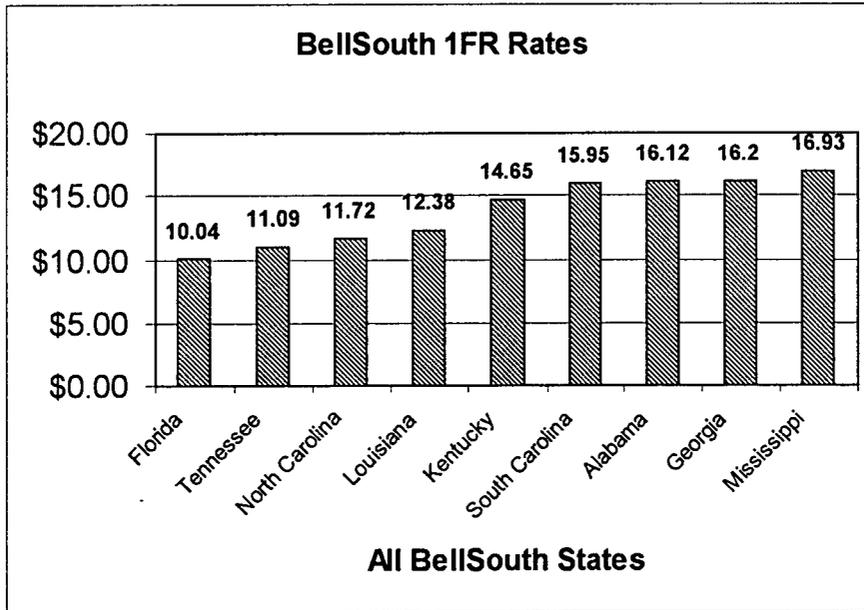
**Exhibit IV-31<sup>82</sup>  
Difference Between Highest and Lowest 1FB Rates within each State**

	AL	KY	LA	NC	FL	SC	TN	MS	GA
Difference	2.65	3.80	4.32	7.08	9.30	10.20	12.65	14.04	24.50

Rates for a single line residential customer in Kentucky are the fifth lowest in the nine-state BellSouth service territory, as shown below in *Exhibit IV-32*.

**Focused Review of the Price Regulation Plan  
BellSouth Telecommunications, Inc. - Kentucky**

**Exhibit IV-32<sup>83</sup>  
BellSouth 1FR Rates**



In looking at 1FR rates for comparative purposes, it is important to recognize that there can be considerable variation in the rates within the states. The following, *Exhibit IV-33*, shows the difference between the highest and lowest 1FR rate in each BellSouth State.

**Focused Review of the Price Regulation Plan  
BellSouth Telecommunications, Inc. - Kentucky**

**Exhibit IV-33<sup>84</sup>**

**Difference Between Highest and Lowest 1FR Rates within each State**

	AL	FL	GA	KY	LA	MS	NC	SC	TN
Difference	1.7	3.35	4.95	5.38	1.67	4.22	2.57	2.7	4.60

**CLEC Costs and Margins**

One measure of the incentive for competitive market entry is the available "margin" in the marketplace. While the numbers for competitors are proprietary, a surrogate number can be calculated by taking the CLEC cost and comparing that to the BST revenue. For purposes of the surrogate, CLEC costs include loop, port, usage, SG&A, and 20% gross margin. The BST rate used includes the 1FB charge hunting, access charges and the subscriber line charge. This is shown in *Exhibit IV-34*, below.

**Focused Review of the Price Regulation Plan  
BellSouth Telecommunications, Inc. - Kentucky**

**Exhibit IV-34**

**BST Revenue and CLEC Costs**

State	BST	CLEC	Difference
Alabama	62.43	35.23	\$ 27.20
Florida	53.27	47.74	\$ 5.53
Georgia	87.34	30.90	\$ 21.67
Kentucky	52.18	36.60	\$ 15.58
Louisiana	58.17	35.68	\$ 22.49
Mississippi	83.65	39.70	\$ 43.95
North Carolina	69.35	36.46	\$ 32.89
South Carolina	71.27	41.90	\$ 29.37
Tennessee	87.65	33.84	\$ 53.81

**C. SERVICE QUALITY**

**DESCRIPTION**

In this task, Vantage will review BST's compliance with both Commission service related regulations and BST's own internal service goals (by exchange or groups of exchanges).

BellSouth is required to report a number of service metrics as part of the PRP. For the most part, these are the same type of measures used by regulators in other states. These measures are:

- 1) Percent of requests for regular service fulfilled within five (5) working days unless applicant specifically requests a later date.
- 2) Percent of requests for regrades within thirty (30) days unless applicant specifically requests a later date.
- 3) Percent of telephone calls receiving dial tone within three (3) seconds, including busy season-busy hour.
- 4) Percent of telephone calls experiencing blockage due to an equipment or all trunks busy condition within the local dialing area. (Including busy season-busy hour.)
- 5) Percent of telephone calls offered to toll connecting or interexchange trunks encountering an all trucks busy signal.
- 6) Average speed of answer for operator assisted calls and calls requiring operator number identification.
- 7) Average Speed of answering time for calls to repair service.
- 8) Percent out-of-service troubles cleared within 24-hours unless the customer requests at a later date.
- 9) Average rate of customer trouble reports per 100 access lines.

BellSouth performance under each of these standards is discussed in the Findings sections. To summarize the results, BellSouth performance has not declined under the PRP, as measured by these standards.

**IV-F7**     BellSouth service has not declined under the PRP.

One of the primary concerns under non-traditional regulation is that service quality may decline. The thinking is that with no guarantee of a return on investment, companies will not have the incentive to invest in the necessary plant and equipment. There is no evidence that this has occurred with BellSouth in Kentucky. In addition to the traditional measures of service, there are more subjective indications that BellSouth has retained a high level of service. The 1999 J.D. Power and Associates survey of service satisfaction ranked BellSouth at the top of telephone providers for the fourth straight year. *Exhibit IV-35*, below shows the results of this survey.

**Focused Review of the Price Regulation Plan  
BellSouth Telecommunications, Inc. - Kentucky**

**Exhibit IV-35**

**J.D. Power and Associates Service Satisfaction Survey**

Company	Score
<b>BellSouth</b>	<b>115</b>
<b>SNET</b>	<b>115</b>
Cincinnati Bell	110
PacBell	105
Bell Atlantic	104
<b>Industry Average</b>	<b>100</b>
ALLTEL	98
Frontier	96
Ameritech	94
GTE	94
SBC	94
US West	92
Sprint	91
Citizens	87

As shown, BellSouth (and SNET) were not only the leaders in service quality satisfaction, but were far ahead of the pack. The survey was based on 12,185 households nationwide, and for the first time included cable companies offering local telephone service. We also point out that Kentucky is fortunate to have two of the top three companies providing local service to the customers of the state.

Vantage can state definitively that the service has not declined based on solid evidence. We can offer up our ideas to the Commission as to why this is the case. BellSouth gets it. Vantage is fortunate to have worked not only in telecommunications but also gas and electric industries where de-regulation is ongoing. Even in the gas and electric industries where competition has been introduced, there are companies whose management and employees simply do not grasp the enormous implications of competition. BellSouth obviously does. Almost all interviews (if not all) conducted with BellSouth employees involved some statement of awareness and concern about competition. Although there is no way to quantify the results of this focus, there is no question that BellSouth management and employees understand the importance of customer satisfaction and accept that customers will have a choice in the future.

**IV-F8**     Certain of the service measures required to be reported under the PRP are arcane and should be removed or modified.

Many of the customer service measures used in Kentucky (and other states) were developed for a technological era that no longer exists. It was an era of mechanical switching,

unsophisticated call centers, 2-party lines, and POTS. Obviously, the technical and competitive situation has changed dramatically. The following addresses the individual measures now required under the PRP, which is addressed in a separate filing. The exception is the out-of-service cleared within 24-hours, which is addressed in a separate finding. For each of these service standards, Vantage has made a recommendation, as shown below in *Exhibit IV-36* to keep, modify, or eliminate the metric.

**Focused Review of the Price Regulation Plan  
BellSouth Telecommunications, Inc. - Kentucky**

**Exhibit IV-36  
Service Measure Changes**

<b>Service Measure</b>	<b>Percent of requests for regular service fulfilled within five (5) working days unless applicant specifically requests a later date.</b>
Standard	90%.
Vantage Evaluation	BellSouth has not missed this measure since December, 1990. BellSouth levels have been between 94% and 99%.
Value going forward	High. While BellSouth has consistently met this standard, it continues to have value. The change in the telecommunications environment has not altered the need for customers to receive new service in a timely fashion.

<b>Service Measure</b>	<b>Percent of requests for re-grades within thirty (30) days unless applicant specifically requests a later date.</b>
Standard	90%.
Vantage Evaluation	BellSouth has improved markedly in the measure. The standard has been missed four times since 1994 and after having been missed 36 times during 1990-1993.
Value going forward	Minimal. There are no longer any applicants for a re-grade in Kentucky for which the measure should apply. Party line service was obsolete on July 10, 1993. The only re-grades remaining are actually initiated by BellSouth to eliminate the 77 remaining BellSouth party lines.

<b>Service Measure</b>	<b>Percent of telephone calls receiving dial tone within three (3) seconds. (Including busy season-busy hour.)</b>
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Standard	95%.
Vantage Evaluation	BellSouth has not missed this objective even once since 1990. The lowest monthly performance over that period was 99.5%.
Value going forward	None. This measure is a carry-over from the days of step and cross bar switching and no longer has any relevance.

<b>Service Measure</b>	<b>Percent of telephone calls experiencing blockage due to an equipment or all trunks busy condition within the local dialing area. (Including busy season-busy hour.)</b>
Standard	No more than 5%.
Vantage Evaluation	BellSouth has met this standard every month since 1990. Only one month exceeded 0.7% over that period and in that month the measure was only 1.3%.
Value going forward	None. Improvements in plant and the greatly increased trunk capacity provided by fiber has virtually eliminated this problem even with the enormous increase in Internet traffic.

<b>Service Measure</b>	<b>Percent of telephone calls offered to toll connecting or interexchange trunks encountering an all trucks busy signal.</b>
Standard	No more than 3%.
Vantage Evaluation	BellSouth has not missed this objective since the beginning of 1990. BellSouth has exceeded 2% on only two occasions since that time, June 1993 (2.6%) and December 1993 (2.55%).
Value going forward	None. The standard has been exceeded every month for nearly ten years. In addition, the interexchange carriers will immediately take BellSouth to task if this measure is not being met to their satisfaction.

<b>Service Measure</b>	<b>Average speed of answer for operator assisted calls and calls requiring operator number identification.</b>
Standard	Not greater than 8 seconds.

Vantage Evaluation	BellSouth has not missed this standard since the beginning of 1990. BellSouth only exceeded 7 seconds on 7 occasions during this period. BellSouth argues that Operator Services are now competitive and should not be regulated on this service measure.
Value going forward	Minimal. This measure and its application have several problems. One as noted by BellSouth, operator services are competitive. Not only does this draw into question the appropriateness of measuring BellSouth, but in the interest of promoting a level playing field, all competitors would be required to submit to the same regulation. However, this is neither desirable nor in keeping with the movement away from regulation. Second, Kentucky and other states require that this measure be reported on a monthly basis. Yet, call center volumes and the resulting answer times vary widely even in a somewhat predictable environment like Operator Services. This means the picture given by the measure is not particularly revealing. Lastly, there is little, if any, evidence that 8 seconds is significant to the customer any more than 7 seconds or 10 seconds or some other reasonable number.

<b>Service Measure</b>	<b>Average Speed of answering time for calls to repair service.</b>
Standard	20 seconds or less.
Vantage Evaluation	The methodology for reporting this measure was changed in 1998. This change was with Commission approval. BellSouth has not exceeded 2.6 seconds since this time.
Value going forward	High. The modified measure is still relatively new and additional time is required for BellSouth to demonstrate that they will consistently outperform this standard. If BellSouth does continue to outperform the standard, they should petition the Commission for elimination of the standard or at least reporting modifications. This measure should also be retained for this time due to the importance of the trouble repair process to the customer and the Commission.

<b>Service Measure</b>	<b>Percent out-of-service troubles cleared within 24-hours unless the customer requests at a later date.</b>
Standard	85%.
Vantage Evaluation	See <i>Finding IV-F-9</i> .

Value going forward	
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<b>Service Measure</b>	<b>Average rate of customer trouble reports per 100 access lines.</b>
Standard	8 or less.
Vantage Evaluation	BellSouth has not missed this standard since 1990. The measure has only exceeded four on three occasions during this period.
Value going forward	None. This measure is also a hold over from an older technology era. The modern phone network could not even function with plant and facilities of such a poor nature to allow 8 trouble reports per 100 access lines.

**IV-F9**     Out of Service cleared within 24-hours may be producing inefficiencies in work completion, while adding little to customer satisfaction.

Vantage separated this service standard for report purposes because the issues surrounding the measure are different than those previously discussed. Time Out of Service remains an important measure. Arguably, it is even more important, today, given the additional disruption that may be caused by the loss of not only voice, but also data, fax, and security links.

BellSouth has argued that the service standard measuring Out of Service cleared within 24-hours is producing inefficiencies in work scheduling. The argument is that work orders, which would logically be completed by an I&R technician, are often bypassed in order to maintain the service standard of completions within 24-hours. For example, trouble reports called in at the end of a workday (a common situation with working families) must be scheduled the next work day in order to meet the 24-hour standard. BellSouth has further argued that the incremental time required to repair an out of service trouble report does not materially effect customer satisfaction.

BellSouth has rarely missed this service objective. *Exhibit IV-37*, below, shows the number of months that the Company has missed this standard since 1990.

**Focused Review of the Price Regulation Plan  
BellSouth Telecommunications, Inc. - Kentucky**

**Exhibit IV-37<sup>85</sup>  
Out of Service Standard**

Number of Months the existing standard has been missed	
Year	Number of times missed
1990	0
1991	0
1992	0
1993	2
1994	4
1995	2
1996	2
1997	4
1998	3
1999 YTD	1

Vantage does not believe that BellSouth wants this measure altered in order to make a difficult objective merely go away. Changing this standard to 36 hours would alleviate much of BellSouth's concerns over work management.

**IV-F10** Service standards for "wholesale" services are handled through interconnection and other party-to-party agreements.

Wholesale service standards are negotiated between the parties, primarily through interconnection agreements. Disputes are handled through operating groups. Although the players and technologies have changed, the method of operation has been in place for years. RBOCs have been working with IXCs and CAPs for a number of years and resolving service standards issues among themselves. Anecdotally, none of the CLECs contacted by Vantage was willing to make any comments regarding the PRP or service standards.<sup>86</sup>

Beyond the interconnection agreements, approval of Section 271 of TA96 also looms in the background in terms of service standards. More specifically, the OSS section which may include service standards at a wholesale level and standards for the customers of the CLEC being resold services. It cannot be said with certainty how the CLECs will respond, in terms of service standard requirements, following 271 approval. However, Vantage team members' experience in arbitration cases suggests that CLECs will request service levels equal to what the ILEC gives itself. As we have described elsewhere in the report, BellSouth has organized its network group, such that it can provide nondiscriminatory services to customers both internal and external.

## RECOMMENDATIONS

*IV-R1*     The Out of Service repair service standard should be changed from 24 to 36 hours. (Refer to Finding IV-F8.)

Vantage concludes that BellSouth should be given the opportunity to prove performance and customer satisfaction under a 36-hour service standard. Out of Service cleared within 36 hours brings the measure in line with BellSouth internal metrics. The 24-hour repair service response time is standard and has been the standard in many states for years. However, there is no evidence that Vantage is aware of that supports 24-hours as being an optimal time period for service repair from either a customer or work management standpoint.

In making this recommendation, Vantage presumes that BellSouth will continue to uphold its civic duty and give those customers who rely on phone service for critical tasks the highest possible priority for service restoration, regardless of the service standard imposed by the Commission. We also recommend that the reporting requirement for any exchange that has missed the standard for more than two months remain in effect. This should now apply to the 36-hour standard.

*IV-R2*     Service standards should be revised to include only those measures providing valuable data in today's environment. (Refer to Finding IV-F7.)

The following table, *Exhibit IV-38*, shows the recommendations for each of the individual service standards currently applied under the PRP.

**Focused Review of the Price Regulation Plan  
BellSouth Telecommunications, Inc. - Kentucky**

**Exhibit IV-38  
Recommended Service Standards**

Standard	Action
Percent of requests for regular service fulfilled within five (5) working days unless applicant specifically requests a later date.	Retain as is.
Percent of requests for regrades within thirty (30) days unless applicant specifically requests a later date.	Eliminate
Percent of telephone calls receiving dial tone within three (3) seconds. (Including busy season-busy hour.)	Eliminate
Percent of telephone calls experiencing blockage due to an equipment or all trunks busy condition within the local dialing area. (Including busy season-busy hour.)	Eliminate
Percent of telephone calls offered to toll connecting or interexchange trunks encountering an all trucks busy signal.	Eliminate
Average speed of answer for operator assisted calls and calls requiring operator number identification.	Eliminate
Average speed of answering time for calls to repair service.	Retain
Average rate of customer trouble reports per 100 access lines.	Eliminate

There are certain underlying themes and assumptions that Vantage used in making these recommendations. These are arguably as important as the individual service measure recommendations.

- 1) Deregulation must also mean less regulation. This may seem almost ridiculously simple, but the reality is that deregulation is taking place in a more macro environment, while most of the RBOC service regulation takes place at state levels using finite measures. One does not necessarily follow the other without planned actions.
- 2) In every measure that Vantage reviewed, BellSouth has continued to operate as a good corporate citizen, i.e., service quality has not declined, capital investment has kept pace with historical levels, and customer satisfaction remains high.
- 3) A primary goal going forward must be to maintain a level competitive playing field among all competitors. Since it is neither practical nor desirable to add regulation to the CLECS and cable, wireless, and Internet providers, which will all be competing in the marketplace, a level playing field should mean minimal

regulation of the one regulated competitor, BellSouth. In some cases, like ISPs, additional regulation is not possible, due to federal preemption.

- 4) In the new environment, we see the role of the Commission transitioning from one of regulating to one of using regulation to protect certain customers, while freeing up the market to competition. This will not be an easy task, but it is one that must be undertaken.
- 5) BellSouth has recently added almost 150 craft workers, which will logically lead to improved service or at least the ability to maintain service levels in the face of growth.

**IV-R3** The Commission should be prepared to revisit the remaining service standards after the industry has "resetled." (Refer to Finding III-F7.)

As discussed elsewhere in this report, there are forthcoming actions which have enormous implications for the industry. These are Section 271 approval, de-averaging, access rate reform, and Universal Service. These changes are in addition to the phenomenal technological changes that have and continue to take place. The Commission must be prepared to react to these changes.

One change that may be necessary is for the Commission to revisit the service standards after the above actions have been settled. Suggestions for possible changes, at that time, include further elimination of reporting standards for market segments that have competition or a move toward an exception basis reporting on certain standards. Unfortunately, market and technological uncertainty make it impossible to spell out a defined framework for subsequent reviews.

## D. STRATEGIC PLANNING

This section gives a brief overview of the strategic planning process used by BellSouth and then, more importantly, talks about the direction and focus of strategic planning and how it has changed to meet the demands of today's marketplace.

### CONCEPTUAL FRAMEWORK

**IV-F11** Strategic planning at BellSouth uses a formalized process that drives from higher level goals and objectives down to individual plans and actions in delineated steps.

Conceptually, the strategic planning process moves from low levels of detail with relatively infrequent changes to frequently changed high detail plans. Although the process itself is formalized, there is flexibility throughout to allow for opinions and dissension. Using BellSouth terms, this can be illustrated as follows.



The BellSouth strategic planning process is not a "bottoms up" process, which is sometimes held up as the standard for utilities. The state organizations are primarily responsible for carrying out the specifics of the strategic plans.

*IV-F13*    BellSouth strategic planning has adapted to the new telecommunications environment.

The BellSouth strategic planning process is well prepared to face the phenomenal changes taking place. BellSouth goes to great efforts to seek out those who are its critics and those who can provide alternative visions and opinions. BellSouth has also recruited personnel from outside the telecommunications industry to try and achieve greater market focus and to infuse new thinking. The dangers to BellSouth come from the market and technology change, not from any inadequacies in the strategic planning process.



## V. ASSESSMENT OF PRP STRUCTURE

### A. TOTAL FACTOR PRODUCTIVITY

#### BACKGROUND

The KPSC has approved a Price-Regulation Plan (PRP) for BST-KY, which is a performance-based rate plan. The PRP provides the Company with some levels of price flexibility for those products and services transitioning into competitive markets. Prices are capped by a formula that includes cost escalation rates as well as a total factor productivity index as an offset to inflation. This report addresses the effectiveness of the Total Factor Productivity Index in the PRP and presents alternative methodologies that might be more appropriate as telecommunication markets become more competitive.

The regulation of those industries considered natural monopolies or public utilities, e.g., telephone, electric, gas and water, has undergone significant change during the last twenty years. For nearly a century, the rates charged by public utilities were based upon historical costs plus the opportunity to earn a fair return on investment. This return was derived by multiplying the allowed rate of return times the depreciated rate base. Rates could not be changed without the approval of that utility's regulatory authority. Typically, the rate application process would take between six months and two years, depending upon individual state's rules and regulations. This time period has often been called -- regulatory lag. Regulatory lag historically served as a potent productivity incentive, as any increases in expenses occurring during the regulatory lag period was borne by the utility and its investors.

During the 1970's, however, the OPEC embargo led the United States into a period of rapidly rising energy prices and overall hyperinflation. Faced with the prospect that costs could escalate at rates up to ten times greater than potential productivity gains, a number of utilities faced financial ruin unless significant changes were made in the regulatory process. In response, regulatory commissions liberalized the rate process by either permitting forecasted rate years and/or instituting automatic rate adjustment mechanisms to recover costs considered outside of management's control.

With the advent of these changes in the rate process, commissions instituted other mechanisms to offset the lost productivity incentives associated with regulatory lag. First, utilities were required to consider potential productivity gains in their derivation of a forecasted test year. While labor productivity was the most common adjustment, total factor productivity (TFP) was also employed. Ultimately, the use of TFP was disregarded over concerns that the TFP measure failed to:

- Accurately measure the productivity of a specific company;
- Accurately forecast productivity gains based on historical trends;
- Properly measure capital versus labor productivity; and

- Properly differentiate scale economies from management initiatives.

Supplementing the imputation of expected productivity gains as an offset to inflation, commissions also instituted a management audit process where commission staff and contracted management consultants would periodically review the performance of a utility. The outcome of such audits could include specific directives, e.g., change or improve a specific process, or compute a specific rate adjustment based on the cost of any acts identified as imprudent. Commissions have imposed "prudence" adjustments for poor system reliability, cost overruns (typically nuclear power plants) and mismanagement.

Notwithstanding these changes in the regulation of the public utilities, costs continued to rise at a pace above the economy at large. The restructuring of the telecommunications industry, followed by natural gas and currently electricity, has witnessed a further shift from strict regulation to greater reliance on competition and other market forces. For those markets, not fully transitioned to true competition, utilities have sought greater pricing flexibility. Performance based rates have provided these utilities with the ability to alter prices with some constraints and to achieve higher returns should the company's performance outpace its own respective industry. Telecommunications companies who provide local access are allowed to raise rates for those products and services that fall in the quasi-competitive environment at the rate of inflation offset by the projected rate of productivity. Typically, the escalation rate is based on the regional economy, while the productivity measure is either for the specific company or for the total telecommunications industry.

### **Total Factor Productivity**

Total Factor Productivity or TFP is an economic term defined as the ratio of percentage change in unit of output to the percentage change in unit of input. As the GNP or Gross National Product is an index of economic growth in the United States as measured by the relative change in good and services produced, the TFP is used by economists to measure the relative level of productivity for specific industry groups. Since the Great Depression, the federal government has consistently practiced a Keynesian approach to control the economy by employing a combination of fiscal and monetary policy. The key barometers of growth are economic expansion and productivity. Unfettered economic expansion can lead to inflation unless productivity gains can offset the impact of rising prices and wage rates.

The FCC, in response to the Telecommunications Act of 1996, promulgated a proceeding to review and modify its price cap plan for local exchange carriers in preparation for further deregulation and introduction of competition "to further the new pro-competitive, deregulatory paradigm." In its Order 97 - 159, the FCC claimed that the "new price cap reflects a more reliable careful analysis of the rate of growth of incumbent LEC total factor productivity (TFP) and the rate of change of LEC input prices."

Conceptually, there are four ways that a firm can improve its productivity.<sup>87</sup> In the short run, a firm can, in effect, learn to "do without." Downsizing and right sizing are two examples of how firms can reduce input costs while maintaining the same level of output.

For LECs, workforce reductions have been a key to their efforts to achieve productivity gains.

Over the long run, a second form of productivity can be increased via technological advancement, the substitution of capital versus labor (e.g. automation) and improved operational practices.

While reducing the cost and quantity of inputs can improve productivity, the level of output can have similar effects. A third level of productivity can be achieved simply by adding new customers or increasing sales. Typically, telecommunication companies are capital intensive and maintain a significant level of surplus capacity. For example, because the system is designed to meet peak demand conditions, off peak periods offer significant opportunity to expand sales for very little marginal cost.

Finally, output based productivity gains can be achieved over the long run via economies of scale associated with the growth of the overall network and of scope given the capital intensive nature of the industry. Either through expanded services or acquisition, the larger the company, in terms of customers and sales, the less expensive it can be to add even more products and services.

The historical tracking of Total Factor Productivity measures the relative change in the ratio of inputs to outputs. As a result, over time, the TFP index measures all four types of productivity improvements outlined above.

In general, the TFP index provides a general measure of a firm or industry's relative level of productivity as compared to other industries, or to the same industry over time. While historical trends do provide a basis to assess opportunities for future productivity gains, it by all means is not a determinant. For example, a firm with a high ratio of fixed to variable costs and significant excess production capacity, most of the short-term productivity gains will be derived from short-term sales growth, which may be a more reliable predictor. However, for industries challenged with the need to implement rapidly improving technology simultaneous with the introduction of new competitors, the long term input productivity gains can be offset by the short- and long-term loss of sales.

Finally, the TFP index measures the total productivity of a firm. Differentiating the productivity of either a given product line or primary input like labor, can be very difficult, if not misleading. Clearly, a firm which produces a single product line has a better chance of tracking total labor and capital productivity. Even firms with multiple product lines can achieve the same assuming the amount of common plant and other common input expenses are minimal. However, multi-product and multi regional companies with significant shared or common facilities and costs will be challenged to derive an appropriate allocation scheme in its efforts to measure partial productivity.

Given the above discussion, the use of the TFP index raises several concerns, which can be summarized as follows:

- The TFP index was never intended to be a predictor of future productivity.

- TFP measures the total industry or a firm's overall productivity. It does not differentiate input versus output driven productivity gains or short-term versus long-term productivity gains.
- Multi-regional and multi-product or service firms with significant common facilities cannot accurately disaggregate productivity by region or service level.

## IMPEDIMENTS TO MARKET COMPETITION AND FULL ACCESS

V-F1 A TFP index set too high can hinder achievement of some of the desired objectives.

BST-KY has raised several concerns they believe result from a TFP index set too high. First, they argue that a high TFP index reduces their potential revenues and as a result reduces the amount of available capital resources to expand their system into less profitable areas, namely, rural Kentucky. Secondly, BST-KY argues that the reduced revenues also limits their ability to upgrade their system in a means that provides more efficient access for potential competitors who wish to use their network. Finally, BST-KY argues that their retail prices in some instances are below cost, and as a result, their wholesale prices, set for competitors, can be greater than BST-KY's own retail rates. In summary, BST-KY argues that the KPSC's very goal to enhance competition is stymied by a TFP index set too high.

BST-KY's arguments make sense only if the company cannot achieve the productivity gains projected by the TFP index. BST-KY argues that the rapid gains in TFP achieved in prior years was driven by downsizing and that future gains will be minimal as the company again needs to increase its internal resources. Furthermore, future capital investments into new systems and operations, while introducing greater efficiency, must be shared with its competitors who have access to BST-KY's facilities. In this regard, BST-KY also points out that a significant portion of its productivity gains are derived from increased sales which foster the greater utilization of existing plant. However, with the transition to a competitive market, BST-KY will likely lose market share, which will offset near term output-driven productivity gains.

BST-KY provides substantial argument and support for a performance based rate that is not weighted down by an excessive TFP based performance target.

## ALTERNATIVES TO TOTAL FACTOR PRODUCTIVITY

V-F2 There are alternatives to the Total Factor Productivity index which foster the types of competitive incentives the KPSC had sought in its Price Regulation Plan.

The Total Factor Productivity index offers several advantages, but as discussed above, none of which foster the types of competitive incentives the KPSC had sought in its Price Regulation Plan. Theoretically, the TFP index would serve as an added incentive for BST-KY's management to either improve performance or face the consequences of lower returns. Unfortunately, even if the forecasted value of the TFP were correct, such a broad based incentive provided no specific direction as to how such savings should be achieved. Any public policy initiative would be tempered against management's primary incentive, that is, to serve and retain its customer base and to achieve a fair return. In fact, as also discussed

above, a targeted TFP that was set too high, might discourage the very objectives the KPSC sought by diverting BST-KY's management away from achieving true productivity gains via technological and process enhancements, but instead focusing on sales growth and retention strategies which would also achieve the TFP target.

### **Management by Objectives**

Until all of BST-KY's products and services are open to full competition, the KPSC will need to regulate the prices set for the non-competitive basket. On balance, the prices should be cost based, yet flexible enough to simultaneously provide BST-KY with the opportunity to respond in a timely manner to the development of greater competition, and to earn an adequate enough return to continue to invest in system upgrades and expansions which offer greater access and further opens the market to competition. As Vantage discusses at length elsewhere, there are also very significant external factors that will influence pricing, such as USF and de-averaging. While the TFP index affords a generalized performance target to achieve, it does not necessarily provide the KPSC with the same level public policy influence it had with traditional cost-based rate regulation. As noted above, the simple TFP target can be achieved by BST-KY via means that are most advantageous to BST-KY, which may not necessarily accomplish the very objectives sought by the KPSC in the first place.

While it is not the role of regulatory commissions to micro-manage the utilities that it regulates, influencing public policy is an important tenet of this quasi-legislative process. Historically, Commissions have long influenced the direction of electric, gas, and telephone companies by issuing public policy statements, holding generic proceedings on special issues and directing specific outcomes as part of a rate award. These and other tactics are synonymous with the management process called "Management by Objectives." While the Commission leaves the actual implementation up to the utility management, clear objectives are enumerated by the Commission as a component of a rate application or other regulatory proceeding. As a result, the regulated utility has specific and clearly defined objectives that must be achieved as part of the rate settlement process. Notwithstanding, this approach to regulation has its limitations. Mandates requiring electric utilities to purchase electricity from independent power producers, at above market costs, resulted in significant price increases and in surplus capacity in the Northeast, now a major component of stranded costs. As a result, the objectives should be clear and flow from the stated public policy objective, and yet, not be so specific as to foster inefficient and distorted management practices.

With a performance based rate mechanism, the KPSC could substitute the productivity target set by the TFP index, by identifying several key objectives it seeks to address as part of the transition process toward competitive markets. Such objectives might address specific issues in:

- Quality of Service
- Economic Development
- Rural Access to Telecommunication Services
- Rate of Competitive Market Development

- Investment in Technologies

The company, not encumbered with a specific productivity number to achieve, would have the added resources to address these objectives.

## OTHER PERFORMANCE-BASED INCENTIVE REGULATORY PLANS

The concept of objective-based performance targets is not a new or an unproven concept. On June 16, 1995, the New York Public Service Commission issued its Order Approving Performance Regulatory Plan for New York Telephone (Case 92-C-0665).<sup>88</sup>

*"The Plan revises the regulatory framework for NYNEX in view of the dynamic changes taking place in the telecommunications industry and the emergence of competition. It provides market-based incentives for investment by substantially deregulating the company's earnings and providing pricing flexibility for new competitive services for a period of five to seven years. It establishes comprehensive incentives for improved service quality during the transition, and it imposes commitments to freeze basic service rates, reduce toll and carrier access rates, limit rate increases for other existing services, and undertake various competitive enhancements and infrastructure improvements."*

While the New York Plan frees the company from TFP type targets and shared earnings formulas, the NYPSC established specific objectives to be achieved accompanied by associated incentives and penalties. The Commission also established a periodic review schedule during this transition period. For example, following the first year of the plan, the Commission found that NYNEX failed to achieve several objectives and was required to refund consumers the penalties established in the plan. In more recent years, Bell Atlantic has met those targets and thus has not been required to refund money back to customers.

On June 28, 1999, a number of interested parties including BST-KY, AT&T, GTE and Sprint have offered the FCC "a proposal to reform interstate access charges and interstate universal service in the context of a continued commitment to universal service."<sup>89</sup> This proposal outlines a number of "Key Objectives" that the parties believe are in the best interest of consumers. While the proposal identifies a number of steps needed to accomplish these objectives relative to the use of the TFP or X-factor, the parties agreed that:

- X-factor reductions would be targeted to local switching and switched transport rates;
- The X-factor should continue to be 6.5% until local switching and switched transport rates reach \$0.55 per access minute for the Bells and GTE, and \$0.65 for other price cap LECs. Together, with phasing out the Carrier Common Line Charge had this plan started July 1, 1999, switched access charges would have been cut by more than half within 3 years; and
- The X-factor should equal inflation once local switching and switched transport rates reach \$0.55 per access minute for Bells and GTE, or \$0.65 per access minute for other price cap LECs.

In essence, this settlement offers a transition away from the TFP adjustment in support of other, more defined public policy objectives, namely:

- Improve choices and value for customers;
- Keep Americans connected with universal service at affordable rates;
- Be Internet/Digital friendly;
- Be Competition-friendly (i.e. encourage efficient investment in real choices for all Americans); and
- Improve telephone subscription among low-income Americans.

While these objectives were offered to the FCC by the joint local and long distance telephone companies, and yet to be approved, it does offer another example of regulatory management by objectives.

Finally, the Kentucky PSC has embraced this approach in its Order associated with the petition for rehearing of Cincinnati Bell Telephone Company (CBT), Case No. 98-292. CBT sought an alternative regulation plan that excluded a productivity target "derived through an earnings sharing mechanism." While the Commission, at first felt that there was a need for a productivity offset, after reconsideration, deleted the earnings sharing mechanism because it "dilutes the incentives to reduce costs, expand output and invest in new infrastructure and new technology, distorts pricing decisions for all the Company's regulated services, irrespective of service costs, current prices and competitive market conditions; maintains theoretical incentives to misallocate costs and subsidize competitive services; and continues to impose regulatory costs and inefficiencies."<sup>90</sup>

## RECOMMENDATIONS

**V-R1**     The KPSC should eliminate the TFP index. (Refer to Findings V-F1 and V-F2.)

After careful evaluation of all the relevant factors, Vantage recommends that the KPSC should eliminate the TFP index for BST-KY. Instead, it should allow rates for services in the non-competitive category to be capped by inflation. Should the KPSC decide that a transition period is appropriate for a movement away from the current 4% TFP index, it should consider directing BST-KY to make investments in achieving certain policy objectives. The KPSC should identify the specific policy objectives that BST-KY will need to accomplish and BST-KY will be responsible for determining, upon KPSC review and approval, the methodology and expense that will be charged against this fund.

Vantage does caution, however, against applying a traditional regulatory approach in this manner by determining a level of funds and requiring BellSouth to apply them to specific infrastructure. This would not, in fact, eliminate the productivity factor as recommended, but rather would reduce revenue flowing to BellSouth using a different term or mechanism. This is not the intended result. Future regulation will need to concern itself with the rates for those customers with no competitive choice, but not with revenue overall. Otherwise, BellSouth would be the only competitor with revenue restrictions.

Vantage suggests a cooperative approach between the Commission, state government, and BellSouth whereby the parties work together to determine telecommunications goals and visions and then identify specific projects and infrastructure goals to meet those goals. Vantage consciously refrained from suggesting specific infrastructure improvements. This is for the parties involved to decide. Some suggestions on areas of infrastructure include:

- Expanded local calling access to BellSouth Internet service. (BellSouth has no control over where and how ISPs elect to serve).
- Improved infrastructure and perhaps special pricing in economically depressed areas of Kentucky to encourage call center development and resulting jobs.
- Continued expansion of the KIH.

BST-KY is currently required to complete a productivity study as part of their compliance with the PRP. Vantage would encourage the KPSC, BST-KY, and other key parties to attempt to reach an accord on an alternative to this study. We reiterate the statements above, that productivity studies are largely retrospective in nature and are not particularly applicable in an industry that is undergoing significant technological and structural changes.

**V-R2**      Change the non-competitive service category pricing formula to allow for price increases at inflation. (Refer to Finding V-F2.)

It is difficult to fully discuss this recommendation at this point as subsequent analysis and recommendations in this *Report* impact upon this recommendation.

However, as a starting point, this recommendation will allow BS-KY to raise the overall non-competitive service category rates to an index based upon the GDP-PI. The elimination of the productivity factor will eliminate the potential for forced service category rate reductions, as has been the case in each of BST-KY's required annual filings.

The mirroring of intrastate access rates with interstate access rates should be maintained. The competitive category should maintain its pricing rules--no limit on price changes and a price floor of LRIC.

## **B. SERVICE CATEGORIES**

The PRP established three service categories into which BST-KY's retail services were classified:<sup>91</sup>

- Non-competitive -- services, products and options which are commonly included in basic local exchange service packages, or for which there is no competitive substitute.
- Interconnection -- interconnection and access services commonly purchased by other telecommunications providers.
- Competitive -- services that are not classified as non-competitive or interconnection.

The PRP defined procedures by which BST-KY could seek to re-classify a service between categories.

**V-F3** BST-KY has not petitioned the KPSC to re-classify a single service since the PRP was implemented.

To move a service from the non-competitive category to the competitive category requires either a demonstration that competition exists for the service or that the complimentary nature of a service has changed.<sup>92</sup> BST-KY does believe that it may seek some service reclassifications to the competitive category.<sup>93</sup>

**V-F4** There is currently no basis for re-defining the three service category classifications.

No party has petitioned the KPSC to modify the service category classifications. Vantage has not identified nor been made aware of any evidence suggesting that the three service classification categories need to be modified. For example, to define a new service category that captures services "about to become competitive", positioned as a transition between the non-competitive and competitive service categories would only add an extra layer of complexity to deal with definitions of "competitive" and "about to become competitive." Likewise, to simply move *Residential 1FR* service into a new category of "frozen rates" does not upgrade the PRP regulations as this service revenue is excluded from the pricing mechanisms of the non-competitive service category.

Vantage has not identified any rationale supporting a decision to disaggregate the non-competitive service category into multiple service categories in which each category would have a unique pricing mechanism.

**V-R3** BST-KY should review the services contained in the non-competitive service category and, based upon the KPSC standards, submit a petition to the KPSC for their re-classification to the competitive category. (Refer to Findings V-F3 and V-F4.)

A review of the services in the non-competitive service category reveals several that would appear to warrant re-classification. These would include, at a minimum, services associated with operator assistance, directory and white pages. It was not within the scope of Vantage's assignment to perform a comprehensive study of each non-competitive service and apply the KPSC's standards for re-classification.

### C. SERVICE CATEGORY PRICING FORMULAS

The PRP defines pricing formulas for each service category. Several regulations were defined to provide BST-KY with pricing flexibility beyond the service category formulas. First, BST-KY was allowed to file tariffs which priced services below LRIC to meet the equally low price of a competitor. Second, Contract Service Arrangements (CSAs) are offered by BST-KY where there is a reasonable potential for uneconomic bypass of the Company's services.<sup>94</sup> The revenue generated by CSAs is considered "competitive" by the

KPSC and, is therefore, excluded from the non-competitive service category pricing formulas.<sup>95</sup>

**V-F5**      The pricing formula for the non-competitive service category requires modification.

As fully discussed in *Section A of this Chapter*, Vantage has recommended the elimination of the productivity factor from the pricing formula. As such, the pricing formula for the non-competitive service category requires modification. A second component in the pricing formula is the GDP-PI. The current PRP threshold level of 8% was not fully supported in the KPSC Order in Case No. 94-121.

**V-F6**      BST-KY has not filed any tariffs or entered into any CSAs which have requested prices below LRIC.

As stated, BST-KY has not availed itself of this PRP pricing flexibility option. Vantage concurs with BST-KY in that this option, though not utilized to-date, should remain in the prospective PRP.<sup>96</sup>

**V-F7**      BST-KY has appropriately utilized CSAs.

BST-KY's use of CSAs has been limited in number and revenue impact. The number of contracts entered into by year and the amount of revenue are shown in *Exhibit V-1*, below. Some of the yearly contract totals reflect renewal contracts as well as BST-KY's portion of a regional BellSouth contract. The CSA revenue by year, while growing, has been immaterial in relation to BST-KY's total revenue.

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**Focused Review of the Price Regulation Plan  
BellSouth Telecommunications, Inc. - Kentucky**

**Exhibit V-1  
Contract Service Arrangement Levels**

	1994	1995	1996	1997	1998
Number of CSAs <sup>97*</sup>	N/A	81	91	129	118
Value of CSAs <sup>98</sup>	\$193,001	\$824,258	\$1,840,675	\$5,821,906	\$9,021,838

\* Includes special service arrangements (contracts for services not offered in BellSouth's tariffs).

Some parties have raised a concern that CSAs are anti-competitive. Vantage understands their argument to focus on a provision in some jurisdictions that either CSAs are not subject to resale or that the contracts have such huge termination fees, that essentially the customer is locked in for the duration of the contract. First, we note that the KPSC has approved each CSA BST-KY has submitted, as required, for approval. Second, the conditions described above are not applicable to BST-KY CSAs. All of their CSAs are subject to resale and should

a CLEC purchase a CSA to offer the contract services to the current customer, BST-KY does not receive any termination fees from the customer. However, should the CLEC subsequently cancel the CSA with BST-KY prior to its termination, the CLEC will incur termination fees.

## PRESUMPTIVE VALIDITY

One of the issues that arose in our discussions with BST-KY was the issue of "Presumptive Validity". Under this concept, a tariff change proposed by BST-KY would be assumed to be valid until the KPSC ruled otherwise. The basis of the concern is that under the current rules, if an intervenor objects on any grounds to the proposed changes, implementation is delayed until the KPSC issues an order. This can take months to occur, during which time BST-KY is restrained from implementing the change. Examples of delays that have occurred are the \$.25 Call Plan and the LATAwide Area Plus service filings.

**V-F8** Seven of the nine BST States have wording in their PRPs or statues that address presumptive validity.

A review of applicable PRPs across all BBT States and statutes provided references to types of activity that is treated as presumptive validity. All but Tennessee and Kentucky have language that addresses the issue. (See Exhibit V-2, below.)

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### Focused Review of the Price Regulation Plan BellSouth Telecommunications, Inc. - Kentucky

#### Exhibit V-2<sup>99</sup> References to Presumptive Validity

State	Section
Alabama	13.06
Florida	(6)(a), 364.163 (2), (5), and (8)
Georgia	V
Louisiana	5.b.
Mississippi	A36.1.4.D.1
North Carolina	IV.A.1
South Carolina	3.D.

**V-R4** Change the PRP regulations to allow for a reasonable level of presumptive validity. (Refer to Finding V-F8.)

The seven states identified, above, all use different wording to address the issue. Vantage believes that there are adequate avenues available for the KPSC or intervenors to raise

questions and delay the introduction of proposed tariffs without hindering BST-KY's ability to act and react in a competitive environment.

The Georgia Interim Tariff requirement point V, in Docket No. 5833-U, states:

*"V. Any tariff filing will be presumed to be valid and shall become effective, unless suspended, revised or denied by the GPSC, 30 days after the filing."*

## D. EVALUATION OF PRP OBJECTIVES

The PRP originally established five objectives:

- Ensure Basic Service.
- Maintain High Quality Service.
- Meet Customers Needs and Enhance Technology.
- Incentives for Technology Investments.
- Flexibility for Pricing, Depreciation, and Changing Market Place.

Since these objectives were crucial as a framework for Vantage's review, we have articulated our understanding of what each of these objectives represents.

### ENSURE BASIC SERVICE

State and Federal telephone legislation, since its inception, has had as a primary focus the provision of basic phone service. Moreover, this has also meant the provision of this service at an affordable rate. Complicating the issue is the fact that an "affordable" or "reasonable" rate is difficult to quantify. In order to ensure that rates were affordable in low density (primarily rural areas) service territories, various subsidy mechanisms were utilized in establishing rates, which served to artificially reduce rates for residential customers and even more so for rural residential customers.

While it is important to recognize the broad and far reaching issues of Universal Service and rate de-averaging, Vantage took the specific PRP goal of ensuring basic service to mean that no provision of the PRP would directly or inadvertently disencent BST-KY from maintaining basic plain old telephone service (POTS).

The PRP has been successful in this regard. Combined with continuous improvements in technology, basic service is not only available, but available at high quality. BST-KY has fewer than 100 party lines, and old measures of service quality such as dial tone within 3 seconds have been exceeded for so long and by so great an amount, that they are no longer relevant.

### MAINTAIN HIGH QUALITY SERVICE

A concern under any plan which no longer allows a utility guaranteed recovery of capital costs plus a return, is that the necessary dollars will not be invested to maintain plant and equipment. This would, of course, result ultimately in reduced service quality. There are

also concerns as a result of TA96 (enacted after the PRP), which brings into question how much new investment an incumbent may recover. These are serious concerns and ones that will continue to be issues into the foreseeable future.

As we describe in *Chapter 4*, BST-KY service quality has remained high. Further, customer satisfaction with BST-KY is the highest of any local exchange carrier as measured in the J. D. Power Survey.

## MEET CUSTOMERS NEEDS AND ENHANCE TECHNOLOGY

This is perhaps the most difficult of the PRP objectives to articulate and certainly to quantify. This is primarily the result of both customer needs and technology increasing at a phenomenal rate. Competition has pretty much assured that business customers can find the technology to fit their needs and a provider will be there to provision the service. For the residential customer the answer is not so clear. To read the trade journals, residential customers are clamoring for high speed Internet access. Yet the reality is that only approximately 20 percent of the U.S. population has any access to the Internet. The constraint here is not phone lines, but customer equipment (computers and modems) and a desire to be on the Internet. The reality is that relatively few customers are actually demanding enhanced facilities, and more importantly, willing to pay. The Vantage yardstick here was not whether all customers wishing high-speed Internet access had it available, but whether BST-KY had made reasonable efforts to provide enhanced technology where the demand and payback were reasonable. The answer is yes, by any reasonable measure.

For example, BellSouth has rolled out ATM as part of the KIH, they also offer ADSL to ISPs who then sell the service to their Internet customers. BellSouth is also a "participant" in packet switched technology whereby CLECs collocate frame relay and ATM switching equipment in BellSouth offices. While these technologies are being provided by a second party in this instance, the benefit still flows to the Kentucky customer. BellSouth also has bundled service offerings to the extent allowed by combining customer calling features and area wide plans that can be customized by the customer. While not a "new technology" this is an example of additional telecommunications benefits flowing to customers.

## E. ONGOING PRP OBJECTIVES

This section discusses Vantage's views on the continuation of the five original PRP objectives and the requirement for any additional prospective PRP objectives.

**V-F9**      The original PRP objectives should be maintained. However, additional objectives are required to facilitate the introduction of competition in Kentucky.

The PRP's original five objectives remain valid on a prospective basis. However, the Telecommunications Act of 1996 and the subsequent FCC Interconnection Order have altered the telecommunications industry more than was envisioned at the time the PRP was introduced. The key component relates to the concept of UNEs and their pricing, based on TELRIC methodology costs plus overhead cost contribution to CLECs.

The main intent of the Telecommunications Act of 1996 was the introduction of competition in the local exchange market. The FCC's Interconnection Order provided the framework upon which UNEs would be offered by ILECs, at a price equal to the associated TELRIC cost plus common cost contribution. The impact of the UNE pricing decision was to put in play the relationship of ILEC retail rates and UNE prices. Clearly, if UNE prices (recurring plus non-recurring) exceed comparable retail rates, competition may not be immediately forthcoming. Likewise, where UNE prices fall below retail rates, the introduction of uneconomic competition may occur.

The PRP should not be viewed as a vehicle for the introduction of competition in all markets in Kentucky. More pointedly, the PRP - in whatever structure - will not be the catalyst to effect residential local service competition. There are many other factors involved, such as the RBOCs attempt to gain Section 271 approval and the subsequent ability to offer long distance service within their regional territory. However, the PRP should not, either through its structure or regulations, create an impediment to the introduction of competition.

A primary factor in encouraging economic competition in Kentucky is a realization that implicit/explicit subsidies within BST-KY's retail rates need to be minimized, if not totally eliminated. Vantage believes that the KPSC, through its various rulings over the past several years, shares this position. Vantage also believes that the KPSC is very concerned with the impact upon residential rates, as they have been the beneficiary of various subsidy supports. A flash-cut of subsidy elimination is not appropriate as the impact upon residential customers could be dramatic. However, gradual movement towards the underlying objective is warranted.

BST-KY's transition to being able to effectively compete in a more competitive marketplace has been facilitated by the regulations of the PRP. The PRP service baskets and corresponding pricing schemes have provided BST-KY some flexibility in addressing subsidy elimination. For example, business rates have come down dramatically. Likewise, intrastate access rates, through the PRP mirroring provision with interstate access rates, have also seen decreases.

However, the price movements have been slow. IXCs complain about "excessive" access rates, including NTSRR. BST-KY has serious concerns regarding residential rates set below incremental cost, as exhibited by their rate restructuring proposal.<sup>100</sup> The KPSC has implicitly agreed with the need for additional flexibility by approving two BST-KY petitions to deviate from the PRP provisions by applying non-competitive service basket mandated price decreases to the interconnection service category, in particular, NTSRR.

The objectives of the prospective PRP need to be set out in an Order to reflect the relationship between BST-KY retail rates and incremental cost and the impact of the Telecommunications Act of 1996.

V-R5 The KPSC should maintain the five current objectives of the PRP. However, two new objectives should be added. (Refer to Finding V-F9.)

These two objective statements are:

- Permit all BST-KY retail rates to move towards incremental cost or market price.
- Ensure that the potential introduction of competition to all markets in Kentucky is not hindered by the PRP.

The first objective essentially reiterates a prior recommendation from this chapter -- that the current PRP provision on freezing residential rates be removed. The process by which residential rates would be modified is more fully discussed in *Chapter VII*. However, it is sufficient to state here that this objective does not permit significant increases to residential rates. In point of fact, the BST-KY proposal would have limited the immediate increase to residential rates to 10% or less and then frozen those new rates for two years. An additional provision was that the KPSC would then have allowed for another review of the BST-KY retail rate structure.

This first new objective also has an impact upon business rates, toll rates, vertical services, and access charges. The benefit from this PRP objective is a KPSC realization that the entire BST-KY retail rate structure and its inherent subsidies need to be acted upon sooner rather than later.

The second proposed new objective simply assures all current and potential competitors within Kentucky that the PRP will not place them in an unfair competitive position with respect to BST-KY. It also reflects a view that no regulatory action, by itself, can force or guarantee that competitors will come into Kentucky and offer a full package of services to all customers, residential and business, regardless as their location, urban or rural.

Vantage believes that the inclusion of these two new objectives strengthens the prospective PRP and allows for additional flexibility by BST-KY to re-adjust its retail rates. Vantage believes this action is warranted as its review of BST-KY performance under the PRP revealed no inappropriate behavior, and as such, they have earned additional pricing freedoms.



## VI. STAKEHOLDER IMPACT FROM PRP

In conducting this audit, Vantage felt it was important to understand the impact the PRP had on various stakeholders. The reasons for implementing the PRP were varied and different stakeholders either argued for their positions or were silent and underrepresented. The following provides a brief summary of our view of how each stakeholder was affected and what impact we believe the continuance of the PRP is likely to have.

### A. CUSTOMERS

In assessing the impact of the PRP on customers, it is necessary to look at the two primary groups separately. In doing so, one can better understand the interaction of competitive alternatives, cross-subsidization, customer density, and other factors.

#### RESIDENTIAL

##### RETROSPECTIVE IMPACT

**VI-F1**     Residential customers have realized slightly declining rates that are below incremental cost, with continued satisfactory service.

Over the last four years, the PRP has provided rates that were capped and subject to reductions due to the impact of the productivity factor. While the reductions were minimal, one should take into consideration the fact that residential rates are subsidized by business rates, and therefore, are a very good deal. The subsidization of residential rates varies between urban and rural, with the rural rates receiving the highest subsidies.

This subsidization of residential rates has a negative impact as well. The advent of competition in the residential area is not likely to make any significant gains until either subsidies are removed or the costs of competitive technologies drop so low that the entry into residential markets is profitable.

##### FUTURE IMPACT

**VI-F2**     A continuation of the PRP, with the recommendations included in this report, should continue to provide residential customers with below cost rates, although the gap should be allowed to narrow.

The KPSC needs to make some hard decisions regarding its objectives for residential customers. Continued subsidies will inhibit competition. The result is that customers will have artificially low rates in the short-term while losing competitive alternatives that may offer additional services at market rates.

In our recommendations, Vantage suggests that subsidies be reduced in concert with the advent of competitive alternatives. At that point, the market will both set the price and determine the services residential customers want.

## BUSINESS

### RETROSPECTIVE IMPACT

*VI-F3* Business customers, particularly in Louisville, have benefited significantly from the PRP as competitive alternatives became available at discounted rates.

The statistics, provided earlier in this report, clearly show that large-to-medium business customers have had competitive alternatives available at lower prices. There is no question that these customers are benefiting the most from both the design of the PRP and competitive alternatives.

### FUTURE IMPACT

*VI-F4* Business customers should continue to benefit from both the PRP and the influx of competitive technologies.

With the recommendations Vantage proposes, business customers would provide lower subsidies to other classes of customers while continuing to be targeted by new competitors. As with the deregulation of other industries, large customers with complex needs are the first to benefit from a competitive environment. The greater short-term benefit to business customers versus residential customers should be considered on a macro level. The impact of improved productivity resulting from lower rates and a broader range of services has a direct positive impact for everyone in Kentucky. As businesses are more profitable, the job market expands and all residents get an indirect benefit.

## B. BELLSOUTH CORPORATION

### RETROSPECTIVE IMPACT

*VI-F5* BST-KY, as well as its parent company-BellSouth, has benefited significantly from the PRP, with improved productivity, increased focus on service, revised depreciation rates, and pricing flexibility.

Despite arguments that the productivity factor was too high and that some of the service standards were counter-productive, BST-KY has gained enormously from the PRP. These gains were two-fold. First, the PRP incited BST-KY to streamline its work force, more appropriately allocating resources in a fast changing industry. While we cannot be certain, we would speculate that under traditional cost regulation, BST-KY would not have been as aggressive in striving for improved productivity.

Secondly, earnings have increased dramatically despite the rate reductions imposed by the PRP pricing formula. The reasons for these increases have been discussed earlier and need to be kept in a historical perspective.

## FUTURE IMPACT

**VI-F6** In the future, the PRP should permit BST-KY to make the difficult and risky transition to a more competitive industry while continuing to improve its rate structure and facilitate competition.

Over the next few years, the telecommunications industry will continue its transformation. It is our belief that a properly designed PRP, with flexibility for changes, will facilitate this transition. BST-KY faces great risk in the transition and will be forced to undergo major changes in their business and invest in new technology. Their success is not assured. However, to the degree that the PRP provides them the opportunity to compete on a level playing field as competitors enter their markets, they have an excellent chance of effectively responding.

## C. BELLSOUTH EMPLOYEES

### RETROSPECTIVE IMPACT

**VI-F7** During the first three years of the PRP, the BellSouth workforce was reduced significantly.

As was illustrated in *Exhibit IV-9* there was a reduction in staffing at BellSouth during the first two years, and the average salary went down significantly, reflecting the reduction in higher paid management employees. While these reductions were done through attrition and retirement packages, the reductions were naturally of concern to all employees. During the last year, additional workload has resulted in an increase in staffing.

To the credit of BellSouth, it appears that the reorganizations and realignment of duties have resulted in continued levels of good reliability.

### FUTURE IMPACT

**VI-F8** The future for BellSouth employees is tied largely to the success of the overall company business plan and its intent to achieve the transition to competition.

While in the past, employees could have justifiably argued that the PRP caused a reduction in the workforce, today, one could argue that it will help to stabilize and perhaps increase the same workforce. The reasons are twofold. First, the reliability requirements of the PRP force management to maintain an adequate, and as we have seen, growing workforce. As long as these reliability standards are well-defined, there should be a direct correlation between the increase in services and customers and the number of employees. The second reason why we may see an increase in workforce is the need by BellSouth to move into new markets. Data and network technologies will open a broad range of new opportunities for BellSouth employees, although one should caution that there may be a change in skill sets required by employees in the future.

## D. CLECS

### RETROSPECTIVE IMPACT

*VI-F9*     The PRP has permitted some inroads in competition by CLECS, although it is not clear as to whether the PRP was the driving factor in their entry into the Louisville business market.

To date, there has been a concerted effort by CLECs to go after many business customers in the urban areas of BST-KY. However, while there are a large number of CLECs registered to do business in Kentucky, the percentage actually selling services is small.

### FUTURE IMPACT

*VI-F10*    Should subsidies for residential rates be reduced, there is some likelihood that the activity of CLECs will increase.

As has been stated a number of times in this report, the subsidies inherent in BST-KY's retail rates limit residential competition at this time.

## E. IXC/CLECS

### RETROSPECTIVE IMPACT

*VI-F11*    There has been almost no local competitive activity on the part of IXC/CLECs.

This is largely due to the ongoing battles over FCC 271 issues regarding RBOCs being allowed to provide long distance service and the apparent unwillingness of long distance carriers to enter local competition.

### FUTURE IMPACT

*VI-F12*    The entrance of IXC/CLECs into local markets is more dependent on national issues and their competitive strategies than on the design of the PRP.

The strategies and actions of large, long distance carriers will be based on factors outside the purview of the KPSC. The battle for telecommunications supremacy is taking place on a national and worldwide stage. No state regulatory commission will sway when an international company decides to compete in any telecommunications market. The best the KPSC can hope to accomplish is structuring a level playing field through its regulations that encourages competitive entry.

## F. STATE REGULATORS

### RETROSPECTIVE IMPACT

*VI-F13* The regulatory load for state regulators has been minimized during the first four years of the PRP.

One of the objectives of the PRP was to minimize regulatory oversight and burden for both the Company and the KPSC. This objective has been met. Except for the review of the annual reports and rulings on a small number of exception requests, there have been limited requirements in the areas that the PRP encompasses.

The above statement does not suggest that the KPSC has not had to face major telecommunications issues during this period. In fact, there have been and still are a number of major issues that need to be resolved before true competition can be expected.

### FUTURE IMPACT

*VI-F14* While the continuation of the PRP will require minimal regulatory interaction, the other related regulatory issues that must be resolved will create a continuing burden for the KPSC in the short-term.

Except for the proceedings related to this review, the PRP requires very little regulatory oversight. Vantage suggests that the KPSC set for itself the objective of achieving deregulation of the telecommunications industry. However, there are a number of related regulatory issues that require resolution prior to that objective being satisfied. These are discussed, in detail, in *Chapter VII*.

## G. STATE GOVERNMENT AND ECONOMIC DEVELOPMENT GROUPS

### RETROSPECTIVE IMPACT

*VI-F15* To date, the PRP has had little direct impact or interaction with political or economic development interests.

The PRP, as currently designed, is not intended to meet the objectives of State Government and Economic Development Groups. However, during discussions with State Government and Economic Development representatives, we learned that there was great interest in how BST-KY could help with statewide issues.

### FUTURE IMPACT

*VI-F16* The recommendations Vantage makes in *Chapter VII* address the opportunity to benefit the customers and citizens of Kentucky by directing some of the benefits to economic development activities.

As stated in *Chapter VII*, Vantage proposes using the PRP as a means of generating benefits for customers through an improved economic development focus.



## VII. PLATFORM TOWARDS DEREGULATION

Vantage has proposed in *Chapter V* significant recommendations to the PRPs prospective objectives and regulations. In sync with this recommended PRP, Vantage has also recommended in *Chapter VI* that the KPSC state for itself an objective of moving from the PRP regulatory mode to a fully deregulated telecommunications environment. In this section, a platform of activities to be undertaken by the BST-KY and the KPSC to achieve that objective is discussed.

**VII-F1**    The Kentucky state-wide wholesale UNE price structure in conjunction with BST-KY's subsidy laden retail rate structure inhibits the successful transition to a deregulated telecommunications marketplace.

The KPSC itself, in Administrative Case No. 360, stated "under traditional regulatory rules and prior to the 1996 Act, specific implicit urban to rural and business to residential subsidies were established through traditional rate cases."<sup>101</sup> The establishment of UNE rates, based upon TELRIC methods, following the FCC's Interconnection Order has exacerbated the need for retail rate subsidies to be eliminated.

The key issue is an examination of retail versus UNE rates and the impact upon potential CLEC competition. Consider the business case example that BST-KY responded to in Docket No. 97-074. The example considered three business lines (RG 5), one vertical feature, Touch-Tone and hunting.<sup>102</sup> Based upon current BST-KY retail rates and UNE prices, the total retail cost for a customer, including SLC, is \$153.95. The UNE-recurring cost to a CLEC for the same package, including a derived local usage value, is \$84.19.<sup>103</sup> This amounts to a 45% discount for the CLEC. Obviously, the CLEC will offer a price for this package above its UNE cost such that the effective potential disparity between BST-KY's retail price and the CLEC's retail price, based on UNE cost and contribution, will be less than 45%, but still at a level for the CLEC to significantly under-price BST-KY.

If such a disparity exists, why isn't there more aggressive CLEC entry into the Kentucky business markets? One answer is found in the UNE non-recurring charges a CLEC incurs. For the business example above, a CLEC would be billed nearly \$327 in UNE non-recurring charges for procuring the package.<sup>104</sup> If customer churn is assumed at 18 months, then the CLEC would be adding essentially \$18 to their monthly UNE costs. After adding in CLEC marketing costs, the initial disparity between BST-KY's retail rate and the recurring UNE costs shrinks considerably.

What lessons does this example provide? First, CLECs may be attracted to offering services at a niche level to business customers since the BST-KY retail rates include some amount of subsidy under which a CLEC may gain a price advantage. Second, UNE non-recurring charges act as a potential deterrent to competition. Third, a state-wide UNE cost continues to send inappropriate signals as it contains an implicit subsidy between urban and rural rates. It also begs the question that if BellSouth rates are truly "too high", then why do competitors not build a competing network as was originally envisioned in TA96?

The corresponding situation exists between BST-KY's retail residential rates and UNE costs. BST-KY's Residential 1fr rates, which have been frozen since implementation of the PRP, range from \$12.17 (RG1) up to \$17.55 (RG5).<sup>105</sup> With just the recurring UNE cost of the loop, NID, and port equaling \$22.61, it's not difficult to understand the lack of residential competition, when non-recurring UNE costs, CLEC marketing costs and contribution are factored into the price equation. This situation is ripe for several actions to be undertaken by the KPSC. First the KPSC should be focused on rate re-balancing to begin the elimination of implicit subsidies.

The KPSC has recognized the impact such an action will have. It has stated in Administrative Case No. 360, that "the KPSC realizes that eliminating part or all of the implicit subsidy embedded in urban business rates and urban residential rates will affect those customers most likely to see local competition in the near future."<sup>106</sup>

The current statewide UNE costs will require some form of de-averaging to move them more in alignment with actual BST-KY retail rate group rates. Furthermore, the FCC requires de-averaging of UNEs. Currently, a state-wide UNE may inhibit the introduction of competition, as this "average" cost does not reflect a true TELRIC cost in a particular grouping of wire centers, for example. The KPSC appears to be in agreement with this principle of UNE de-averaging. It has stated that "at the very least, UNE cost estimates should be recalculated on a geographically de-averaged basis."<sup>107</sup>

Second, the issue of UNE non-recurring charges also needs to be addressed. These non-recurring charges represent a significant initial cost investment by CLECs to initiate service for new customers. One particular point relates to the CLECs purchase of the UNE platform for an existing customer. The KPSC, in its ruling on BST-KY's SGAT filing, ruled that "while BellSouth may charge a reasonable, non-recurring, cost based "glue charge" for its expertise in having combined the UNEs, the KPSC finds that neither BellSouth nor any other ILEC shall indulge in the wasteful habit of physically separating UNEs for no other apparent reason than to disrupt migration of a customer to the services of another carrier."<sup>108</sup> At this time, BST-KY has not re-filed an SGAT with the non-recurring "glue charge."

Third, another subsidy element is the Non-Traffic Sensitive Revenue Requirement (NTSRR). With the KPSC's recent approval of BST-KY's petition to deviate from the provisions of the PRP by applying required non-competitive service category reductions to the interconnection service category<sup>109</sup>, the NTSRR is now approximately \$22.3 million, of which the IXCs pays \$14.1 million and the balance of \$8.2 million is implicit in BST-KY's intraLATA toll rates.<sup>110</sup> The KPSC has signaled its intent with respect to NTSRR, wherein Administrative Case No. 360, it stated "elimination of NTS is a priority and will be considered along with the elimination of other implicit subsidies."<sup>111</sup>

**VII-R1** The BST-KY should work with the KPSC to undertake several proceedings with the aim of eliminating implicit/explicit subsidies from BST-KY's retail rates, establishing de-averaged recurring UNEs, and modifying non-recurring UNEs. (Refer to Finding VII-F1.)

This recommendation is adjunct to the recommendations made to a prospective PRPs objectives and regulations provided in *Chapter V* (e.g., pricing at inflation for the non-

competitive service basket). This recommendation is the most critical as it addresses pricing issues related to the non-competitive and interconnection service categories. The initial component of this recommendation proposes limited residential rate re-balancing, with a new freeze on the revised rates, and BST-KY's proposal related to intrastate access charges. Vantage believes these initiatives are critical to properly re-shaping BST-KY's retail rates and the elimination of subsidies.

The KPSC has indicated its concern over adjusting residential rates prior to addressing the intertwined issues associated with universal service.<sup>112</sup> However, the lack of movement at the FCC regarding this issue and the apparent intent to move universal service funding from a revenue benchmark to a cost benchmark provides the KPSC with opportunity to move forward and address critical issues. Recognizing that the FCC has not yet finalized its cost proxy model, and based upon the Joint Board's recommended range of 115 to 150% above the national average for determining federal support, BST-KY, itself, is unsure of what amount, if any, it will obtain.<sup>113</sup>

The time is, therefore, ripe for the KPSC to aggressively move forward in a systematic manner and address issues related to implicit/explicit subsidies in BST-KY's retail rates and begin to lay the foundation supporting the introduction of economic competition for all customers.

This recommendation calls for the KPSC to initiate the following hearings:

- Re-balance BST-KY's residential and NTSRR rates.
- De-average BST-KY's recurring UNE costs.
- Re-examine BST-KY's non-recurring UNE costs, especially the required platform UNE charge and the commended "glue charge".

## RATE REBALANCING

### VII-F2 BST-KY had reached a settlement with various parties regarding Rate Rebalancing.

BST-KY had reached a settlement with various parties: AT&T, MCI, Sprint, the Attorney General, and Metro Human Needs Alliance in its application to restructure rates in Case No. 97-074.<sup>114</sup> As part of that proposed settlement, the parties had agreed to a \$2.93 per month increase to residential rates in all rate groups, various NTSRR reductions, and adjustments to business touch-tone rates. The settlement was rejected by the KPSC on the basis that subsidy issues would be decided in its Administrative Case No. 360.

### VII-R2 Vantage recommends that the issues of rate re-balancing be reassessed by BST-KY and the KPSC and, that together with other involved parties, an effort be made to move forward with a limited rate re-balancing. (Refer to Finding VII-F2.)

In discussions between BST-KY and Vantage, BST-KY has proposed a "hypothetical" alternative. Under this scenario, residential rates would be adjusted by rate group, with no rate group incurring an increase greater than 10%: RG1 would increase \$1.22, RG2 would increase \$1.30, RG3 would increase \$1.37, RG4 would increase \$1.43, and RG5 would

increase \$0.95. Additionally, some vertical services would see increases, as well as measured plans and area calling plans. The total annual revenue impact is \$14.1 million. The offset would reduce the IXC portion of the NTSRR to zero.<sup>115</sup>

BST-KY has also stated that these revised residential rates would remain frozen for two additional years. Additionally, the non-competitive service basket price increase would be limited to 5% per year, as opposed to the current 10% cap. In conjunction with this, BST-KY would commit to reducing intrastate access charges to \$.0055 (originating/terminating, less NTSRR) by the July 2002 Annual Filing.<sup>116</sup>

Vantage believes this overall plan has merit and should be considered. The proposed residential rate increases are significantly less than that agreed to by the parties in the previous settlement. The proposal begins to narrow the subsidies inherent in residential rates and eliminates an explicit access subsidy. Under this proposal (or some variation), the KPSC is positioned to act upon any USF recommendations forthcoming by the FCC. In conjunction with the increase in residential rates, the Kentucky low-income portion of the state USF, more commonly known as Lifeline, should be reviewed with potential customer credits being linked to actual retail residential rates.

### **RECURRING UNE COST DE-AVERAGING**

This action is simply a continuation of the KPSC's rulings on UNE costs in various BST-KY arbitrations. In point-of-fact, the KPSC has already recognized the need for UNE de-averaging; refer to the KPSC's Order in Administrative Case No. 360, dated May 22, 1998, in particular, the discussion associated with *Footnote #52*. UNE de-averaging must occur in order to eliminate any artificial barriers hindering CLECs ability to compete with BST-KY. A statewide average creates a "subsidy" between urban and rural areas which is contrary to the KPSC's stated objectives of eliminating subsidies. The de-averaging should be on a wire center basis and as closely tied to the composition of BST-KY's current rate groups as possible.

### **NON-RECURRING UNE COSTS**

The KPSC should require BST-KY to present a cost study supporting the development of both a platform UNE non-recurring charge and the "glue charge. The platform non-recurring charge is based upon the Supreme Court's ruling which recognized that the FCC had the authority to define UNEs. Subsequently, the FCC did define the platform (loop and port) as a UNE. Apparently, no CLEC has requested the purchase of the platform from BST-KY as they have not yet submitted a TELRIC cost study supporting their proposed non-recurring charges. The concept of a "glue charge" for BST-KY's "expertise" while not explicitly discussed in various FCC orders none-the-less may remain a viable charge to be authorized by the KPSC.

As has been indicated above, non-recurring UNE costs represent a potential impediment to CLECs competing for BST-KY customers. The current UNE non-recurring charge of \$86.08 for the 1<sup>st</sup> UNE loop and NID and \$37.55 for the UNE port would be significantly less if bundled into platform UNE non-recurring charges.

The benefit of this recommendation is movement towards elimination of some subsidy elements in BST-KY's retail rates and the establishment of appropriate recurring and non-recurring UNE costs to encourage more competitive entry into telecommunications markets throughout Kentucky.

## VIII. APPENDIX

### A. GLOSSARY OF TERMS

<b>Access Charge</b>	A charge by a telephone company to a long distance (interexchange) company for availability and use of its telephone facilities for origination and termination of long distance (interexchange) calls.
<b>Accelerated Depreciation</b>	A change in depreciation accounting that reduces the number of years over which a depreciable asset will be amortized.
<b>Access Line</b>	The facilities between a telephone company central office and a customer that are required to provide access to the local and toll switched network.
<b>Accounting Separations</b>	FCC Rules that are supposed to separate the costs of providing regulated and unregulated services through the use of Cost Allocation Manuals (CAMs).
<b>Alternate Access Vendor (AAV)</b>	A firm providing transport of calls from customers to long distance carrier points of presence (POPs), or between a given customer's multiple locations, typically using a fiber ring. Also referred to as Competitive Access Providers (CAPs).
<b>Alternative Operator Services (AOS)</b>	Alternative operator services are operator services provided by companies other than the traditional telephone companies. Usually an AOS provider will contract to provide all the operator services from telephones located on private premises, such as a hospital or hotel, or from private pay phones.
<b>American Telephone and Telegraph (AT&amp;T) 1982 Consent Decree</b>	(also called Modification of Final Judgment, or MFJ): A judicial settlement ending the Federal Government's 1974 antitrust suit against AT&T, BellLabs, and Western Electric. Among the provisions were (1) the divestiture of the local exchange service and access functions of the 22 Bell operating companies; and (2) the modification of the 1956 AT&T Consent Decree so that post-divestiture AT&T could enter into unregulated markets. The divestiture took place on January 1, 1984.

<b>Antitrust Consent Decree</b>	An agreement between the U.S. Department of Justice and a defendant settling an antitrust case prior to a court ruling. The government's 1974 monopolization case against AT&T was settled by a consent decree approved by Judge Greene in 1982. The consent decree proposed by the DOJ separated the monopoly local exchange from competitive lines of business: long distance, information services, and equipment manufacturing. Also see "Modification of Final Judgment" and "Divestiture."
<b>Basic Local Exchange Service</b>	The portion of local exchange service comprised of an access line and dial tone provided to the premises of residential or single-line business customers for the transmission of two-way interactive switched voice grade communication for usage within the local calling area that is billed at one flat rate.
<b>Bellcore (Bell Communications Research, Inc.)</b>	The research and development consortium jointly owned and funded by the seven Regional Bell Operating Companies.
<b>BellSouth</b>	One of seven Regional Bell Operating Companies, it is the parent of the Southern Bell and South Central Bell telephone companies. BellSouth's Southern Bell and South Central Bell subsidiaries serve the states of Alabama, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina and Tennessee.
<b>Broadband</b>	The amount of bandwidth generally needed for video and high speed data transmission. Broadband services can be carrier in analog or digital format. A cable TV system employs broadband transmission. These technologies are capable of carrying a great deal of information in a short amount of time, but are more expensive to use than voice grade technologies like telephone which require less bandwidth.
<b>Broadband ISDN</b>	A network standard for voice, data, and video in the same network. The network is fiber based with rates of 150 MB/S and 600 MB/S, initially.
<b>Bundled Rates</b>	Rates in which the various rate elements which comprise the service are consolidated.

<b>Bypass</b>	Technological alternatives to local telephone company facilities that generally fall into two categories, service bypass and facilities bypass. Service bypass refers to the use of local exchange company dedicated access facilities as an alternative to switched access facilities. Facilities bypass refers to the use of non-telephone company provided services (i.e., fiber, short-haul microwave, and direct satellite to rooftop antennae.)
<b>Carrier's Carrier</b>	A provider of telecommunications services to other carriers who then provide services to customers. Does not offer service directly to the public.
<b>Carrier of Last Resort</b>	In today's environment, an incumbent local exchange company that is obligated to provide basic local exchange service in all of its local calling areas in response to reasonable requests for service.
<b>Cellular Mobile Radio Service</b>	A radio telecommunication service provided using a cellular radio system. This service falls under the category of Commercial Mobile Radio Services (CMRS).
<b>Carterfone Decision</b>	An FCC decision striking down tariff restrictions that had prohibited attachment or connection to the public telephone system of any equipment or device not supplied by the telephone.
<b>Cellular Radio System</b>	An automated, high-capacity system of one or more multi-channel base stations designed to provide radio telecommunication services in the 800 MHz band to mobile stations over a wide area in a spectrally efficient manner. Cellular systems employ techniques such as automatic power control and automatic hand-off between base stations of communications in progress to enable channels to be reused at relatively short distances. Cellular systems may also employ digital techniques such as voice encoding and decoding, data compression, error correction, and time or code division multiple access in order to increase system capacity. Radio frequencies, technical and operational requirements are set forth in <i>Part 22</i> of the FCC's Rules.

<b>Collocation (Expanded Interconnection)</b>	When a user of telephone company services places transmission equipment in the same building that houses the telephone company's switches. The Telco is responsible for all maintenance and repair of the equipment under an equipment lease agreement. The collocator does not have access to his own equipment under virtual collocation.
<b>Common Costs</b>	Costs incurred for the benefit of an enterprise as a whole, but not for the benefit of an individual service or group of services. They are not impacted appreciably by changes in the quantity of any particular service, or group of services. If they are common to all services, they are also known as overhead costs.
<b>Competitive Access Provider (CAP)</b>	See "Alternate Access Vendors (AAVs)."
<b>Cross Subsidization</b>	The use of revenues generated by one service to support below-cost pricing of another service. The concern is that a regulated service may subsidize an unregulated service. This activity disadvantages competitors in the business market being subsidized. But, historically basic residential flat rate service has been subsidized by the services that are now competitive. The accepted test of cross-subsidization is if the price of a service is greater than its long run incremental costs then it is not being subsidized.
<b>Customer Access Line Charge (CALC)</b>	See "Subscriber line charge."
<b>Customer Premises Equipment (CPE)</b>	All telecommunications terminal equipment located on the customer premises, such as PBXs, data equipment and telephone sets.
<b>Depreciation</b>	Accounting allowance made for the decrease in property or equipment value through wear, deterioration, or obsolescence.

<b>Depreciation Reserve</b>	A balance sheet account which reflects the portion of the costs of depreciable public utility assets that have been recovered from ratepayers as an expense. In theory, the cost of the depreciable asset should be fully recovered by the time the asset is retired from service. If the actual schedule of recovery is such that some costs will remain unrecovered when a depreciable asset is due for retirement, a depreciation reserve deficiency is said to exist.
<b>Deregulate</b>	To remove a service from the jurisdiction of, and oversight or regulation by, a public service commission.
<b>Detariffing</b>	Removal of the requirement that a service be offered under a tariff filed with the regulatory agency. Regulatory agencies use detariffing as one tool for freeing regulated companies from price controls in competitive markets.
<b>Divestiture</b>	The court agreement implemented on January 1, 1984 that caused AT&T to divest itself of its Bell Operating Companies. The divestiture agreement settled a 1974 federal antitrust case against AT&T, and was signed in January 1982, while the antitrust case was being tried before Judge Harold Greene in U.S. District Court. The Court approved the agreement with modifications later in the year.
<b>800 Service</b>	A long distance telephone service wherein the caller places a call using the "800" prefix as the area code and the party being called pays for the call.
<b>Enhanced Services</b>	Defined by the FCC in Computer Inquiry II as services offered over transmission facilities which employ computer processing applications that act on the format, content, code, protocol or similar aspects of the subscribers information; provide the subscriber additional, different or restructured information; or involve subscriber interaction with stored information.
<b>Equal Access</b>	Provision of local exchange access service in equal kind and quality to all long distance companies. Allows for customers to have their local telephone company automatically deliver long distance calls to the carrier of their choice.

<b>Exchange</b>	A geographical area served by one or more central offices, within which the telephone company provides local telephone service.
<b>Federal Communications Commission (FCC)</b>	A board of five commissioners appointed by the President under the Communications Act of 1934, having the power to regulate interstate and foreign communication originating in the United States.
<b>Fiber Optics</b>	Technology based on thin filaments of glass that use light instead of electricity to transmit data, images and sound and provide vastly greater capacity for transmission than previous technologies.
<b>Fiber Ring</b>	A fiber transmission path within a given area. Service reliability is enhanced because any two points on the ring can be reached from either direction.
<b>Fully Distributed Costing</b>	A costing methodology which assigns a percentage of all common costs, including overhead, to individual services.
<b>Gross Domestic Product-Price Index (GDP-PI)</b>	The gross domestic product fixed weight price index calculated by the U.S. Department of Commerce.
<b>Incremental (Marginal) Costing</b>	The forward looking costs which will be advanced by expanding production of a service or deferred by reducing the level of production of a service. The incremental costs of a service do not include any joint or common costs.
<b>Independent Telephone Company</b>	A telephone company which is not affiliated with AT&T or the Bell Operating Companies, but is the designated established carrier for the provision of telecommunications common carrier service in a specific geographic area.
<b>Inside Wiring</b>	The telephone wires within a customer's home or place of business that are on the customer's side of the point of intersection between the telephone company's communications facilities and the customer's facilities.
<b>Interconnection Service</b>	The service of providing access to a local exchange company's facilities for the purpose of enabling another telecommunications company to originate or terminate telecommunications service.

<b>Interexchange Carrier (IXC)</b>	A carrier authorized by the FCC to provide interstate long distance communications services between LATAs; a carrier authorized by a state public service commission to provide long distance communications services.
<b>InterLATA</b>	Telecommunications services originating in one local access and transport area (LATA) and terminating in another LATA or outside of a LATA.
<b>Internet</b>	An internationally connected system of university, government and commercial networks providing a variety of data interchange services.
<b>IntraLATA</b>	Telecommunications services originating and terminating within the same local access and transport area (LATA).
<b>Joint Cost Rules</b>	Rules promulgated in FCC Docket No. CC 86-111, which are intended to prevent cross-subsidization of diversified business by insuring proper allocation of costs between regulated and non-regulated operations of telephone companies. These rules describe a range of cost methods which the FCC considers acceptable in principle. The <i>Tier I</i> local telephone companies must submit their own specific CAMs for FCC approval.
<b>Jurisdictional Separations</b>	The process by which telephone property costs, revenues, expenses, taxes and reserves are assigned between interstate operations, subject to the jurisdiction of the FCC, and intrastate operations, subject to the jurisdiction of the several state regulatory bodies.
<b>LATA (local access and transport area)</b>	One of almost 200 local telephone exchange areas established as a result of the AT&T divestiture. The Bell Operating Companies are not allowed to provide services between or among LATAs.
<b>Local Area Network (LAN)</b>	A data transmission network connecting a number of communications devices (e.g., computers, printers, servers) within a single building, campus of buildings or geographic area.

<b>Local Calling Area</b>	The geographic area encompassing one or more local exchanges as described in existing commission orders or in maps, tariffs, and rate schedules reviewed and approved by a commission.
<b>Local Exchange Company</b>	A telecommunications company holding a certificate of public convenience and necessity to provide local exchange services.
<b>Local Exchange Services</b>	Services offered for the transmission and utilization of two-way interactive communications and associated usage within the local calling area.
<b>Local Loop</b>	That part of a communications circuit between the subscriber's premises and the equipment in the central office.
<b>Local Switched Interconnection Service</b>	That part of switched interconnection service provided for the purpose of originating or terminating a call which originates and terminates within the local calling area.
<b>MFJ (Modification of Final Judgment)</b>	The Divestiture agreement between the Justice Department and AT&T that forced AT&T to get out of the local exchange business and give up its local phone companies. It required the divested companies to provide equal access to long distance (interexchange) carriers. See also "Antitrust Consent Decree" and "Divestiture."
<b>Microwave System</b>	Generally, a digital or analog transmission system employing the use of radio frequencies above 890 Mhz.
<b>Non Traffic Sensitive Revenue Requirement (Recovery) [NTSRR(R)]</b>	The mechanism used in Kentucky to recover the common line revenue requirement from intrastate access.
<b>North American Numbering Plan (NANP)</b>	The dialing plan for the U.S., Canada, Caribbean and northern Mexico that allow locations on local telephone networks to be uniquely identified by a 10-digit telephone number.
<b>ONA (Open Network Architecture)</b>	Overall design of a communication carrier's basic network, permitting all network users (including all enhanced service providers) to connect equally to the basic network capabilities.

<b>Personal Communications Services (PCS)</b>	Radio communications that encompass mobile and ancillary fixed communication that provide services to individuals and businesses and can be integrated with a variety of competing networks. Most of these services will be provided using radio frequencies in or near the 2 Ghz frequency band. These services generally fall under the category of Commercial Mobile Radio Services (CMRS) and are governed by <i>Part 24</i> of the FCC's Rules.
<b>Point of Presence (POP)</b>	The geographic location where a long distance (interexchange) carrier's facilities interconnect those of the local exchange carrier.
<b>Portability</b>	The technical capacity that permits a customer to retain the same local number at the same customer location regardless of the provider of local exchange service.
<b>Price Regulation</b>	The regulation of a company's prices versus the regulation of a company's earnings. Changes in prices are constrained through various mechanisms such as price ceilings, price floors, inflation based formulas, etc.
<b>Private Branch Exchange (PBX)</b>	A telephone switch installed on the user's premises, that permits a user to receive incoming calls, to dial other telephones on the premises, to access a tie line leading to another PBX or to access an outside line to the public switched telephone network. Many PBXs also offer call-control and call-accounting features.
<b>Private Line</b>	A non-switched telephone service used by high-volume or special-needs customers which offers a line between specific points solely for the customer's private use. See also "leased circuit."
<b>Productivity Factor</b>	The element of a price regulation or price cap formula that captures the difference between telecommunications industry productivity and economy wide productivity.
<b>Public Switched Network</b>	A switching system providing switching and transmission facilities to many customers; any common carrier network providing circuit switching between public users. The term generally applies to the public telephone network.

<b>Rate of Return Regulation</b>	A method of regulation that specifies that maximum rate of return -- a ratio of net profit to total invested capital -- a telephone company is authorized to earn. Appropriate only in an environment with little or no competition. Generally involves social contracts between a company and the state that have historically created artificial pricing policies.
<b>Regional Bell Operating Company (RBOC)</b>	One of seven regional holding companies created by the AT&T divestiture to take over ownership of the Bell Operating Companies within their region. They are: Ameritech, Bell Atlantic, BellSouth, NYNEX, Pacific Telesis, Southwestern Bell and US WEST.
<b>Resale Carrier</b>	A carrier that does not own transmission facilities, but obtains communications services from another carrier for resale to the public for profit.
<b>Special Access</b>	Non-switched exchange access service provided by local telephone companies. Used to make direct connections between a long distance provider's point of presence and an end user customer.
<b>SONET</b>	Stands for "synchronous optical network," a high speed fiber optic transmission technology that can carry services such as broad cast quality video, electronic data interchange (EDI), long distance medical imaging, multimedia education, and movies on demand.
<b>Subscriber Line Charge</b>	A charge paid by the telephone subscriber for the ability to access an IXC for the purpose of originating and terminating interstate calls and to defray a portion of the expense of providing the subscriber's access lines. The charge is a fixed monthly fee determined by the FCC, assessed by the telephone company on each line of a subscriber.
<b>Switched Access</b>	That part of switched interconnection service provided for the purpose of originating or terminating a toll service.

<b>Switched Interconnection Service</b>	That part of interconnection service which utilizes the local exchange company's switching facilities to provide line or trunkside access or both to the local exchange company's end office or tandem switches for the purpose of originating and terminating the telecommunications services of other telecommunications companies.
<b>Tandem Office</b>	A major Telco switching center for the switched telephone network, which interconnects two or more central offices that cannot be directly connected; a major switching center linking several end offices and/or IXC points of presence especially in high-density areas.
<b>Tariff</b>	The schedule or other writing filed with a commission that describes the rates, terms, and conditions of certain telecommunications services provided by the telecommunications company.
<b>Telco</b>	Telephone company.
<b>Telecommunications Company</b>	Any person, firm, partnership, corporation, association, or municipal, county or local governmental entity offering telecommunications services for hire or compensation.
<b>Telecommunications Services</b>	The services offered to customers for the transmission and utilization of two-way interactive communications and associated usage.
<b>Telephony</b>	Voice telecommunications.
<b>Toll Service</b>	The transmission of two-way interactive switched communications between local calling areas.
<b>Total Factor Productivity (TFP)</b>	A specific study methodology for defining industry inputs and outputs.
<b>Transport</b>	Facility between the telephone company and the IXC's point of presence and/or end user premises.

<b>Unbundled Access</b>	[Section 251(C)(3), Telecommunications Act of 1934] The duty to provide, to any requesting telecommunications carrier for the provision of a telecommunications service, nondiscriminatory access to network elements on an unbundled basis at any technically feasible point on rates, terms, and conditions that are just, reasonable, and nondiscriminatory in accordance with the terms and conditions of the agreement and the requirements of this section and <i>Section 252</i> . An incumbent local exchange carrier shall provide such unbundled network elements in a manner that allows requesting carriers to combine such elements in order to provide such telecommunications service.
<b>Unbundled Rates</b>	Rates in which the various rate elements that comprise the service are separately stated.
<b>Uniform System of Accounts</b>	A FCC prescribed accounting system encompassing both balance sheet and income statement accounts, used to review the operations of telecommunications common carriers under its jurisdiction.
<b>Universal Service</b>	The provision of widely available, reasonable, affordable basic local exchange services for all customers. Generally considered to encompass a basic set of services to provide access to the local network.
<b>Universal Service Fund (USF)</b>	The fund established to explicitly support universal service and by extension the processes involved in identification, collection, and disbursement of such funds.

- 1/ IR #133. Note - CLECs approved in multiple states would be counted more than once.
- 2/ IR #133 - Exhibit Source.
- 3/ IR #133.
- 4/ IR #133.
- 5/ IR #133.
- 6/ IR #133.
- 7/ "The Next Generation of Service Provider" Presented by Anurag Lal Vice President, Data and Internet Product Management e.spire Communications, Inc.
- 8/ *Local phone competition increasing*. USA Today, September 2, 1999. Referencing FCC data.
- 9/ Hyperion data obtained from [www.hyperion.net](http://www.hyperion.net).
- 10/ [www.icgcomm.com/telecom](http://www.icgcomm.com/telecom) 8/28/99.
- 11/ [www.icgcomm.com/telecom](http://www.icgcomm.com/telecom) 8/28/99.
- 12/ [www2.espire.net](http://www2.espire.net) as of August 11, 1999.
- 13/ IR # 131, Book 1 of 2, page 6 of 18.
- 14/ [www2.espire.net/products/integrated](http://www2.espire.net/products/integrated).
- 15/ *Reaching for some Lofty Goals*, Colorado Springs Gazette Telegraph Article. Interview with George Koons, GM King's Deer Telephone.
- 16/ King's Deer terminology for fiber in the loop.
- 17/ Roy Furchgott-Roth, "Cutting the Phone Cord," New York Times, September 17, 1998.
- 18/ [Point.com/deafual.asp](http://Point.com/deafual.asp) 8/16/99.
- 19/ [Cnnfn.com/hotstories/deals/9806/24/att/](http://Cnnfn.com/hotstories/deals/9806/24/att/).
- 20/ [www.cabledatcomnews.com](http://www.cabledatcomnews.com) and [www.home.net/news/pr\\_990825\\_01.html](http://www.home.net/news/pr_990825_01.html) 8/28/1999.
- 21/ [www.home.net/source/thetruth.html](http://www.home.net/source/thetruth.html) 9/5/99.
- 22/ [www.directv.com/press/pressdel/0,1112,198,00.html](http://www.directv.com/press/pressdel/0,1112,198,00.html).
- 23/ IR #221.
- 24/ IR #221.
- 25/ IR #196.
- 26/ IR #225.
- 27/ IR # 221.
- 28/ [www.qwest.com/press/story.asp8id=143](http://www.qwest.com/press/story.asp8id=143) Customers are to receive unlimited internet access and 250 minutes of long distance service for a flat rate of \$24.95 per month. Additional interstate minutes are \$.10 per minute.
- 29/ Through EarthLink.
- 30/ IR #121.
- 31/ IR #121.
- 32/ IR #121.
- 33/ IR #121.
- 34/ IR #'s 121 and 215.
- 35/ Lohman 8/4/99 & 8/5/99.
- 36/ IR #'s 121 and 185.
- 37/ IR #121.
- 38/ IR #'s 121 and 185.
- 39/ IR #121.
- 40/ IR #121.
- 41/ IR #'s 121 and 185.
- 42/ IR #'s 121 and 185.
- 43/ IR #121.
- 44/ IR #121.

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- 45/ IR #121.  
46/ IR #121.  
47/ IR #'s 121 and 185.  
48/ IR #121.  
49/ Interview Cunningham.  
50/ IR #121.  
51/ IR #121.  
52/ Interview Cunningham.  
53/ Interview Cunningham.  
54/ IR #121.  
55/ IR #121.  
56/ IR #121.  
57/ IR #'s 121, 192, 185.  
58/ IR #'s 121, 192, 185.  
59/ IR #135.  
60/ Interview Harris.  
61/ IR #135.  
62/ IR #135.  
63/ IR #135.  
64/ IR #194.  
65/ IR #194.  
66/ IR #194.  
67/ IR #194.  
68/ IR #'s 121 and 194.  
69/ IR #'s 121, 185, and 194.  
70/ IR #'s 121 and 194.  
71/ IR #'s 185, 121 (page 10 & 34) and IR #194.  
72/ IR #161.  
73/ Interview Harris.  
74/ Interview Harris.  
75/ IR #189.  
76/ Interview Harris.  
77/ IR #238.  
78/ IR #135.  
79/ IR #154.  
80/ IR #154.  
81/ IR #154.  
82/ IR #154.  
83/ IR #154.  
84/ IR #154.  
85/ IR #237.  
86/ These include Hyperion, ICG and e.spire. AT&T and MCI did make comments, but these comments addressed primarily access issues.  
87/ Reference: "*Price Cap Productivity Factors Can Make or Break Telecom Infrastructure Investments*", by Larry F. Darby, *Communications & Finance*, Vol. 2, No. 5 ( March 17, 1995). Mr. Darby was the former FCC Chief Economist and Chief of the FCC's Common Carrier Bureau.  
88/ Now an operating company of Bell Atlantic.  
89/ June 28, 1999 letter from John T. Nakahara representing the telecommunications companies to Ms. Magalie Roman Salas, Secretary, Federal Communications Commission.  
90/ KPSC's Order relative to CBT's Petition for Rehearing.

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- 91/ BellSouth-KY General Subscriber Services Tariff.
  - 92/ IR #157.
  - 93/ IR #157.
  - 94/ IR #183.
  - 95/ IR #173, Commission Order in BellSouth-KY, MCI Arbitration.
  - 96/ IR #113.
  - 97/ IR #122.
  - 98/ IR #204.
  - 99/ IR #187.
  - 100/ IR #146.
  - 101/ IR #156, Order in Administrative Case No. 360, dated May 22, 1998.
  - 102/ IR #116, Direct Testimony of Fred Gerwing, Exhibit FLG-1.
  - 103/ IR #175.
  - 104/ IR #175.
  - 105/ IR #179.
  - 106/ IR #156, Order in Administrative Case No. 360, dated May 22, 1998.
  - 107/ IR #156, Order in Administrative Case No. 360, dated May 22, 1998, footnote 52.
  - 108/ IR #168, Order in Case No. 98-348, dated August 21, 1998.
  - 109/ IR #231.
  - 110/ IR #235.
  - 111/ IR #156, Order in Administrative Case No. 360, dated May 22, 1998.
  - 112/ IR #146, KPSC's Order Case No. 97-074, dated January 21, 1998.
  - 113/ IR #164.
  - 114/ IR #146.
  - 115/ IR #236.
  - 116/ Vantage, BellSouth-KY Draft Report Review Meeting; September 2, 1999.



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October 25, 1999

To: All parties of record

RE: Case No. 99-434

We enclose one attested copy of the Commission's Order in  
the above case.

Sincerely,

A handwritten signature in cursive script that reads "Stephanie Bell".

Stephanie Bell  
Secretary of the Commission

SB/sh  
Enclosure

Note: The Executive Summary of Management Audit Report is enclosed.  
Copy of the Management Audit Report is available upon request.

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COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

REVIEW OF BELL SOUTH TELECOMMUNICATIONS, ) CASE NO.  
INC.'S PRICE REGULATION PLAN ) 99-434

O R D E R

A proceeding is herein established as contemplated by the July 20, 1995 Order in Case No. 94-121.<sup>1</sup> This proceeding will review the terms of the price regulation plan of BellSouth Telecommunications, Inc. ("BellSouth") and examine options for modifications to it.

The 1995 Order also required BellSouth to undergo a focused management audit pursuant to KRS 278.255. The audit report, filed with the Commission the date of this Order, includes a review of BellSouth's investment decisions, service levels, and financial performance under price regulation. The audit examined BellSouth's productivity trends, assessed the competitive environment in Kentucky, and evaluated BellSouth's response to competition in terms of its network marketing and operational plans and decisions. The audit was performed by an independent consulting firm, Vantage Consulting, Inc. The audit report should be incorporated into the record of this proceeding.

Over the last four years, there have been substantial changes in the telecommunications environment including the FCC's decisions implementing the

---

<sup>1</sup> Case No. 94-121, Application of BellSouth Telecommunications, Inc., d/b/a South Central Bell Telephone Company to Modify its Method of Regulation at 31 and 32.

Telecommunications Act of 1996. The purpose of this docket is to investigate the appropriateness of the components of BellSouth's price regulation plan in this new telecommunications environment.

The Commission, having received the audit report and having been otherwise sufficiently advised, HEREBY ORDERS that:

1. This proceeding is established to review the appropriateness of the Commission's regulation of BellSouth pursuant to KRS 278.512 and KRS 278.514.

2. The audit report of Vantage Consulting, Inc. shall be incorporated into the record of this proceeding.

3. All parties of record in Case No. 94-121 are hereby made parties to this proceeding.

4. By no later than December 17, 1999, BellSouth shall file its response to the audit report and its productivity analysis, and shall propose changes, if any, to its price regulation plan.

Done at Frankfort, Kentucky, this 25th day of October, 1999.

By the Commission

ATTEST:

  
Executive Director



BellSouth Telecommunications, Inc.  
P.O. Box 32410  
Louisville, KY 40232

or  
BellSouth Telecommunications, Inc.  
Room 407  
601 West Chestnut Street  
Louisville, KY 40203

Creighton.Mershon@BellSouth.com

Creighton E. Mershon, Sr.  
General Counsel-Kentucky

502 582-8219  
Fax 502 582-1573

September 8, 2000

RECEIVED

SEP 11 2000

PUBLIC SERVICE  
COMMISSION

Mr. Thomas M. Dorman  
Executive Director  
Public Service Commission  
211 Sower Boulevard  
P. O. Box 615  
Frankfort, KY 40602

RE: Review of BellSouth Telecommunications, Inc.'s Price  
Regulation Plan  
PSC 99-434

Application of BellSouth Telecommunications, Inc.  
d/b/a South Central Bell Telephone to Modify its Method  
of Regulation  
PSC 94-121

Dear Mr. Dorman:

Enclosed for filing in the above-captioned cases are 11 copies of the recent tariff filings made in compliance with recent Commission orders in these cases. This filing is served on the parties of record in both cases. The filing contains confidential, commercial, or proprietary information that has previously been granted confidentiality.

One copy of the proprietary information is provided to the Commission. A copy of the proprietary information is provided to the Attorney General, AT&T, MCI, and Sprint pursuant to a Confidentiality Agreement signed in Case No. 94-121. Requisite edited copies are provided for the public record.

Sincerely,

Creighton E. Mershon, Sr.

Enclosures

cc: Parties of Record  
227287

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing was served on the individuals on the attached Service List by mailing a copy thereof, this 8th day of September 2000.

Creighton Mershon  
Creighton E. Mershon, Sr.

SERVICE LIST - PSC 94-121

Hon. Ann Cheuvront  
Assistant Attorney General  
1024 Capital Center Drive  
P. O. Box 2000  
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SERVICE LIST - PSC 99-434

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Atlanta, GA. 30339

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Attorney at Law  
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Regulatory Compliance  
Coordinator  
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Vienna, VA. 22182

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Tallahassee, FL 32303

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Director of Regulatory Affairs  
IXC Communications Svcs., Inc.  
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Austin, TX. 78746

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Regulatory Analyst  
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Darrell Maynard  
President  
Southeast Telephone, LTD  
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Pikeville, KY. 41502 4150

Kristi Shaw  
Regulatory Analyst  
Teltrust Communications Services  
6322 South 3000 East  
Salt Lake City, UT. 84121

Walter P. Drabinski  
President  
Vantage Consulting, Inc.  
230 Sugartown Road, Suite 110  
Wayne, PA. 19087

Mr. Larry Callison  
GTE  
150 Rojay Drive  
Lexington, KY 40503



BellSouth Telecommunications, Inc. 502 582-8415  
Room 410 Fax 502 582-3247  
601 West Chestnut Street  
Louisville, Kentucky 40203

Fred L. Gerwing  
Regulatory Vice President

September 8, 2000

RECEIVED  
SEP 11 2000  
PUBLIC SERVICE  
COMMISSION

Thomas M. Dorman  
Executive Director  
Kentucky Public Service Commission  
P.O. Box 615  
211 Sower Boulevard  
Frankfort, Kentucky 40602-0615

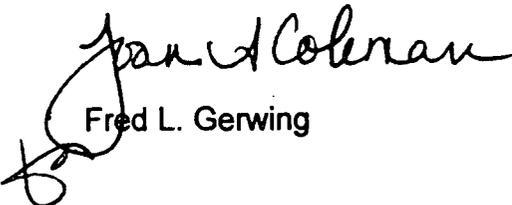
Dear Mr. Dorman:

Enclosed are tariff pages for the tariff filed September 5, 2000, which complies with the Commission's Orders of August 3, 2000 in Case No. 99-434 and August 29, 2000 in Case No. 94-121.

As stated in the September 5, 2000 letter the company realizes that the issue date of September 5, 2000 and an effective date of October 1, 2000 is somewhat less than the 30 days pendency requested in the Commission's orders. The October 1, 2000 effective date makes partial month charges unnecessary and will be easier to implement. The company hopes that this shortened interval does not cause the Commission or its staff undue hardship and is willing to move the tariff effective dates to a date later in October if necessary.

We apologize for any inconvenience to you or your staff that the tariff pages were not available on September 5, 2000. Questions regarding this filing may be directed to Mr. Steve Rausch at 502-582-8180

Very truly yours,

  
Fred L. Gerwing

EDITED

**Filing Package No.: KY2000-078**

**TARIFF PAGES**

A Subject Index	-	Fifth Revised Page 19
Section A3	-	Ninth Revised Page 2
	-	Sixth Revised Page 3.1
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Section A7	-	Tenth Revised Page 8
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Section A20	-	Fifth Revised Page 28
	-	Second Revised Page 30
Section A103	-	Eighth Revised Page 1
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Section J4	-	Thirty-third Revised Page 1

BellSouth Telecommunications, Inc. 502 582-8415  
 Room 410 Fax 502 582-3247  
 801 West Chestnut Street  
 Louisville, Kentucky 40203

Fred L. Garwing  
 Regulatory Vice President

September 5, 2000

Thomas M. Dorman  
 Executive Director  
 Kentucky Public Service Commission  
 P.O. Box 615  
 211 Sower Boulevard  
 Frankfort, Kentucky 40602-0615

Dear Mr. Dorman:

We are filing today the tariffs and priceouts necessary to comply with the Commission's Orders of August 3, 2000 in Case No. 99-434 and August 29, 2000 in Case No. 94-121. A complete copy of this filing will be filed under separate cover in those cases. This filing increases certain residential rates, eliminates the current volume and term discounts available on residential intraLATA toll, eliminates the Non Traffic Sensitive Revenue Requirement, reduces the charge for Payphone Service Provider screening and blocking and reduces the charge for touchtone for business in rate group 5. The net effect of these changes based on priceouts using June 2000 demand where possible, is as follows:

Eliminate NTSRR	(\$7,533,347)
Eliminate Residence MTS Automatic Discounts	\$2,380,609
Increase Residence Access Lines	\$5,537,841
Increase Residence Premium Calling Package	\$ 247,188
Remove Business TouchTone and reduce RG5 Touchtone on PSP Lines to \$2.35	(\$7,215,452)
Roll Touchtone into 2-Way and Out Business Access Lines and Trunks	\$6,742,246
Reduce PSP Blocking and Screening to \$0.90	<u>(\$ 178,136)</u>
<b>TOTAL</b>	<b>(\$ 19,051)</b>

The details associated with these changes are included in attachments to this letter as follows:

Attachment 1	Residential Rate Increases
Attachment 2	Residential MTS volume Discount Elimination
Attachment 3	Business Rate Changes including TouchTone

EDITED

Page 2  
Mr. Thomas M. Dorman  
September 5, 2000

Attachment 4  
Attachment 5  
Attachment 6

**Payphone Service Provider Screening and Blocking  
NTSRR Elimination  
Tariffs** -- There are numerous tariff pages affected by this filing and all are not ready for filing as of 9/5/00. The pages will be provided as quickly as possible.

Several of the priceouts are extracts from the Company's Market Basket Priceout and include proprietary information that was granted confidential treatment by the Commission by letter in Case No. 94-121 dated July 16, 1998 (98-01887). Portions of the priceout associated with the elimination of the intraLATA volume discount are likewise proprietary and a similar priceout was granted confidential treatment by the Commission in Case No. 98-287 by letter dated May 5, 1998 (98-00970). A diskette containing these priceouts is also provided for the Commission's use.

The tariff pages in this filing have an issue date of September 5, 2000 and a due date of October 1, 2000. The company realizes that this is somewhat less than the 30 days pendency requested in the Commission's orders. The October 1, 2000 effective date makes partial month charges unnecessary and will be easier to implement. The company hopes that this shortened interval does not cause the Commission or its staff undue hardship and is willing to move the tariff effective dates to a date later in October if necessary.

Questions regarding this filing may be directed to Mr. Steve Rausch at 502-582-8180.

Very truly yours,



Fred L. Gerwing

BellSouth Telecommunications, Inc. 502 582-8415  
Room 410 Fax 502 582-3247  
601 West Chestnut Street  
Louisville, Kentucky 40203

Fred L. Gerwing  
Regulatory Vice President

September 5, 2000

Thomas M. Dorman  
Executive Director  
Kentucky Public Service Commission  
P. O. Box 615  
211 Sower Boulevard  
Frankfort, Kentucky 40602-0615

Dear Mr. Dorman:

Pursuant to the Rules Governing Tariffs effective August, 1997, I hereby certify that I am the Regulatory Vice President of BellSouth Telecommunications, Inc., a utility, furnishing telephone service within the Commonwealth of Kentucky, which on the Fifth day of September 2000, issued revised sheets of its Intrastate Tariffs to become effective October 1, 2000 and cancels the previously effective sheets as follows:

**GENERAL SUBSCRIBER SERVICES TARIFF**

Subject Index	Fifth Revised Page 19 Cancels Fourth Revised Page 19
Section A3	Ninth Revised Page 2 Cancels Eighth Revised Page 2
	Sixth Revised Page 3.1 Cancels Fifth Revised Page 3.1
	Seventh Revised Page 3.2 Cancels Sixth Revised Page 3.2
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**Mr. Thomas M. Dorman**  
**September 5, 2000**

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**Seventh Revised Page 25**  
**Cancels Sixth Revised Page 25**

**Page 3**  
**Mr. Thomas M. Dorman**  
**September 5, 2000**

**Eighth Revised Page 26**  
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**Section A7**

**Tenth Revised Page 8**  
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**Section A13**

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**Section A18 Contents**

**Sixth Revised Page 1**  
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**Fourth Revised Page 5**  
**Cancel Third Revised Page 5**

**Section A20** **Fifth Revised Page 28**  
**Cancel Fourth Revised Page 28**

**Page 4**  
**Mr. Thomas M. Dorman**  
**September 5, 2000**

**Section A103**

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Mr. Thomas M. Dorman  
September 5, 2000

Seventh Revised Page 2  
Cancels Sixth Revised Page 2

Seventh Revised Page 3  
Cancels Sixth Revised Page 3

**NTSRR AND INTRALATA ACCESS COST RECOVERY**

Section J4

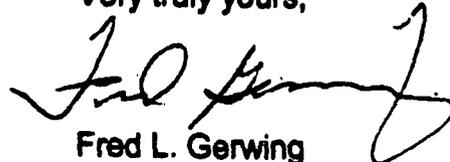
Thirty Third Revised Page 1  
Cancels Thirty Second Revised Page 1

Further, more than 20 customers will be affected by said change by way of an increase in their rates or charges. However, no notice will be published in any newspapers or provided to customers, as this rate increase is due to the Commission's order in Case No. 99-434 dated August 29, 2000.

Notice to the public of the issuing of same is being given in all respects as required by Section 2 of Regulation KAR 5:011.

Given under my hand this Fifth day of September 2000.

Very truly yours,

  
Fred L. Gerwing

## Residential Increases

1FR rates are increased 5% in all Rate Groups except Rate Group 5. Rate Group 5 rates are increased \$0.85. Rates that are related to the 1FR rate are adjusted accordingly. The increases are summarized below:

	RG1	RG2	RG3	RG4	EXCP	RG5
RES 1-PARTY FLAT	\$ 0.60	\$ 0.65	\$ 0.68	\$ 0.71	\$ 0.72	\$ 0.85
RES 2-PARTY FLAT	\$ 0.46	\$ 0.50	\$ 0.52	\$ 0.55	\$ 0.55	\$ 0.67
RES FLAT ISDN, M TO M	\$ 0.60	\$ 0.65	\$ 0.68	\$ 0.71	\$ 0.72	\$ 0.85
RES FLAT ISDN, 24 - 59 MOS	\$ 0.60	\$ 0.65	\$ 0.68	\$ 0.71	\$ 0.72	\$ 0.85
RES STD MEAS	\$ 0.46	\$ 0.50	\$ 0.52	\$ 0.55	-	\$ 0.67
RES LOW USE MEAS	\$ 0.32	\$ 0.35	\$ 0.36	\$ 0.38	-	\$ 0.46
RES MEAS ISDN	\$ 0.45	\$ 0.45	\$ 0.45	\$ 0.45	\$ 0.45	\$ 0.52
RES PLAN LINE	\$ 0.45	\$ 0.45	\$ 0.45	\$ 0.45	\$ 0.45	\$ 0.52
RES PLAN LINE W/LUD	\$ 0.50	\$ 0.50	\$ 0.50	\$ 0.50	\$ 0.50	\$ 0.57
PREMIUM CALLING USAGE PACKAGE	\$1.00					

These increases produce a positive annual revenue effect of \$5,537,841 for residence access lines and \$247,188 for the Residence Premium Calling Usage Package (see attached priceout).

State: Kentucky  
Docket 99-434

Present and Proposed Rates and Revenues  
LOCAL EXCHANGE

Develop Date : 06/00  
Page : 1 of 29  
Run Date : 08/28/00

RECURRING RATES

Tariff Section/ Page # (1)	Service Description (2)	USOC (3)	Present Demand (4)	Proposed Demand (5)	Present Rate (6)	Proposed Rate (7)	\$ Change (8)	% Change (9)	Present Annual Revenue (10)	Proposed Annual Revenue (11)	Annual Revenue Change (12)	MB Seg. (13)
RATE GROUP 1												
A3/2	RES 1-PARTY FLAT		\$12.17		\$12.77	\$0.60	4.93%					1001
A103/1	RES 2-PARTY FLAT		\$9.38		\$9.84	\$0.46	4.90%					1001
A142/4	RES FLAT ISDN, M TO M		\$52.17		\$52.77	\$0.60	1.15%					1576
A42/15	RES FLAT ISDN, 24 -59 MOS		\$48.17		\$48.77	\$0.60	1.25%					1576
A3/2	RES STD MEAS		\$9.38		\$9.84	\$0.46	4.90%					1002
A3/2	RES LOW USE MEAS		\$6.59		\$6.91	\$0.32	4.86%					1002
A142/4	RES MEAS ISDN		\$41.00		\$41.45	\$0.45	1.10%					1576
A3/3.2	RES PLAN LINE		\$9.00		\$9.45	\$0.45	5.00%					1002
A3/3.1	RES PLAN LINE W/LUD		\$10.00		\$10.50	\$0.50	5.00%					1002
RATE GROUP 1 SUBTOTAL												
RATE GROUP 2												
A3/2	RES 1-PARTY FLAT		\$13.02		\$13.67	\$0.65	4.99%					1001
A103/1	RES 2-PARTY FLAT		\$10.02		\$10.52	\$0.50	4.99%					1001
A142/4	RES FLAT ISDN, M TO M		\$53.02		\$53.67	\$0.65	1.23%					1576
A42/15	RES FLAT ISDN, 24 -59 MOS		\$49.02		\$49.67	\$0.65	1.33%					1576
A3/2	RES STD MEAS		\$10.02		\$10.52	\$0.50	4.99%					1002
A3/2	RES LOW USE MEAS		\$7.01		\$7.36	\$0.35	4.99%					1002
A142/4	RES MEAS ISDN		\$41.00		\$41.45	\$0.45	1.10%					1576
A3/3.2	RES PLAN LINE		\$9.00		\$9.45	\$0.45	5.00%					1002
A3/3.1	RES PLAN LINE W/LUD		\$10.00		\$10.50	\$0.50	5.00%					1002
RATE GROUP 2 SUBTOTAL												
RATE GROUP 3												
A3/2	RES 1-PARTY FLAT		\$13.69		\$14.37	\$0.68	4.97%					1001
A103/1	RES 2-PARTY FLAT		\$10.52		\$11.04	\$0.52	4.94%					1001
A142/4	RES FLAT ISDN, M TO M		\$53.69		\$54.37	\$0.68	1.27%					1576
A42/15	RES FLAT ISDN, 24 -59 MOS		\$49.69		\$50.37	\$0.68	1.37%					1576
A3/2	RES STD MEAS		\$10.52		\$11.04	\$0.52	4.94%					1002
A3/2	RES LOW USE MEAS		\$7.34		\$7.70	\$0.36	4.90%					1002
A142/4	RES MEAS ISDN		\$41.00		\$41.45	\$0.45	1.10%					1576
A3/3.2	RES PLAN LINE		\$9.00		\$9.45	\$0.45	5.00%					1002
A3/3.1	RES PLAN LINE W/LUD		\$10.00		\$10.50	\$0.50	5.00%					1002
RATE GROUP 3 SUBTOTAL												
RATE GROUP 4												
A3/2	RES 1-PARTY FLAT		\$14.34		\$15.05	\$0.71	4.95%					1001
A103/1	RES 2-PARTY FLAT		\$11.01		\$11.56	\$0.55	5.00%					1001
A142/4	RES FLAT ISDN, M TO M		\$54.34		\$55.05	\$0.71	1.31%					1576
A42/15	RES FLAT ISDN, 24 -59 MOS		\$50.34		\$51.05	\$0.71	1.41%					1576
A3/2	RES STD MEAS		\$11.01		\$11.56	\$0.55	5.00%					1002
A3/2	RES LOW USE MEAS		\$7.67		\$8.05	\$0.38	4.95%					1002

State: Kentucky  
Docket 99-434

Present and Proposed Rates and Revenues  
LOCAL EXCHANGE

Develop Date : 06/00  
Page : 1 of 29  
Run Date : 08/28/00

RECURRING RATES

Tariff Section/ Page # (1)	Service Description (2)	USOC (3)	Present Demand (4)	Proposed Demand (5)	Present Rate (6)	Proposed Rate (7)	\$ Change (8)	¢ Change (9)	Present Annual Revenue (10)	Proposed Annual Revenue (11)	Annual Revenue Change (12)	MB Seg. (13)
A142/4	RES MEAS ISDN		\$41.00		\$41.45	\$0.45	1.10¢	\$0.45	\$0.45	\$0.45	\$0.00	1576
A3/3.2	RES PLAN LINE		\$9.00		\$9.45	\$0.45	5.00¢	\$0.45	\$0.45	\$0.45	\$0.00	1002
A3/3.1	RES PLAN LINE W/LUD		\$10.00		\$10.50	\$0.50	5.00¢	\$0.50	\$0.50	\$0.50	\$0.00	1002
	RATE GROUP 4											
	RATE GROUP 5											
A3/2	RES 1-PARTY FLAT		\$17.55		\$18.40	\$0.85	4.84¢	\$0.85	\$0.85	\$0.85	\$0.00	1001
A103/1	RES 2-PARTY FLAT		\$13.41		\$14.08	\$0.67	5.00¢	\$0.67	\$0.67	\$0.67	\$0.00	1001
A142/4	RES FLAT ISDN, M TO M		\$57.55		\$58.40	\$0.85	1.48¢	\$0.85	\$0.85	\$0.85	\$0.00	1576
A42/15	RES FLAT ISDN, 24 -59 MOS		\$53.55		\$54.40	\$0.85	1.59¢	\$0.85	\$0.85	\$0.85	\$0.00	1576
A3/2	RES STD MEAS		\$13.41		\$14.08	\$0.67	5.00¢	\$0.67	\$0.67	\$0.67	\$0.00	1002
A3/2	RES LOW USE MEAS		\$9.27		\$9.73	\$0.46	4.96¢	\$0.46	\$0.46	\$0.46	\$0.00	1002
A142/4	RES MEAS ISDN		\$42.50		\$43.02	\$0.52	1.22¢	\$0.52	\$0.52	\$0.52	\$0.00	1576
A3/3.2	RES PLAN LINE		\$10.50		\$11.02	\$0.52	4.95¢	\$0.52	\$0.52	\$0.52	\$0.00	1002
A3/3.1	RES PLAN LINE W/LUD		\$11.50		\$12.07	\$0.57	4.96¢	\$0.57	\$0.57	\$0.57	\$0.00	1002
	RATE GROUP 5											
	EXCEPTION EXCHANGES											
A3/2	RES 1-PARTY FLAT		\$14.50		\$15.22	\$0.72	4.97¢	\$0.72	\$0.72	\$0.72	\$0.00	1001
A103/1	RES 2-PARTY FLAT		\$11.13		\$11.68	\$0.55	4.94¢	\$0.55	\$0.55	\$0.55	\$0.00	1001
A142/4	RES FLAT ISDN, M TO M		\$54.50		\$55.22	\$0.72	1.32¢	\$0.72	\$0.72	\$0.72	\$0.00	1576
A42/15	RES FLAT ISDN, 24 -59 MOS		\$50.50		\$51.22	\$0.72	1.43¢	\$0.72	\$0.72	\$0.72	\$0.00	1576
A142/4	RES MEAS ISDN		\$41.00		\$41.45	\$0.45	1.10¢	\$0.45	\$0.45	\$0.45	\$0.00	1576
A3/3.2	RES PLAN LINE		\$9.00		\$9.45	\$0.45	5.00¢	\$0.45	\$0.45	\$0.45	\$0.00	1002
A3/3.1	RES PLAN LINE W/LUD		\$10.00		\$10.50	\$0.50	5.00¢	\$0.50	\$0.50	\$0.50	\$0.00	1002
	EXCEPTION EXCHANGES											
	TOTAL								\$113,016,836	\$118,554,676	\$5,537,841	

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Present and Proposed Rates and Revenues  
 LOCAL EXCHANGE

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TOTAL REVENUES

	Present Annual Revenue (1)	Proposed Annual Revenue (2)	Annual Revenue Change (3)
SUB-TOTALS			
Recurring	\$113,016,836	\$118,554,676	\$5,537,841
Non-recurring	\$0	\$0	\$0
SECTION TOTALS	\$113,016,836	\$118,554,676	\$5,537,841

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LOCAL EXCHANGE

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TOTAL REVENUES SUMMED BY MARKET BASKET

M B Segment (1)	Service Description (2)	Present Annual Revenue (3)	Proposed Annual Revenue (4)	Annual Revenue Change (5)
1001	FLAT RATE RESIDENTIAL	\$108,952,897	\$114,298,989	\$5,346,092
1002	RESIDENTIAL (MEASURED, MESSAGE, EXPANDED CALLING PLANS)	\$3,759,365	\$3,946,805	\$187,439
1003	BUSINESS	#REF!	#REF!	#REF!
1004	GROUPING SERVICE	#REF!	#REF!	#REF!
1005	NETWORK ACCESS REGISTERS	#REF!	#REF!	#REF!
1006	TRUNK LINES	#REF!	#REF!	#REF!
1007	TRUNK SIDE ACCESS FACILITY	#REF!	#REF!	#REF!
1015	JOINT USER SERVICE	#REF!	#REF!	#REF!
1016	EMERGENCY REPORTING NETWORK SERVICES	#REF!	#REF!	#REF!
1104	BACK-UP LINE	#REF!	#REF!	#REF!
1511	FOREIGN EXCHANGE AND FOREIGN C.O. SERVICE - KY	#REF!	#REF!	#REF!
1529	ANNOUNCEMENT FACILITIES - KY	#REF!	#REF!	#REF!
1576	ISDN INDIVIDUAL SERVICES - RESIDENTIAL AND BUSINESS - KY	#REF!	#REF!	#REF!
2024	TOLL TRUNKS (TOLL TERMINALS)	\$304,573	\$308,882	\$4,309
2054	DATA TRANSPORT SERVICE ACCESS CHANNEL SERVICE	#REF!	#REF!	#REF!
3001	ACCESS LINE SVC FOR CUST. PROVIDED TELEPHONE	#REF!	#REF!	#REF!

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Present and Proposed Rates and Revenues  
A003 BASIC LOCAL EXCHANGE SERVICE

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RECURRING RATES

Tariff Section/ Page # (1)	Service Description (2)	USOC (3)	Present Demand (4)	Proposed Demand (5)	Present Rate (6)	Proposed Rate (7)	\$ Change (8)	¢ Change (9)	Present Annual Revenue (10)	Proposed Annual Revenue (11)	Annual Revenue Change (12)	MB Seg. (13)
A3/3.2	A003.02.08 PREMIUM CALLING USAGE PACKAGE RESIDENCE				\$20.00	\$21.00	\$1.00	5.00¢				1002
A3/3.2	A003.02.08 PREMIUM CALLING USAGE PACKAGE BUSINESS				\$55.00	\$55.00	\$0.00	0.00¢				1003
							SUBTOTAL		\$5,705,400	\$5,952,588	\$247,188	
							TOTAL					